

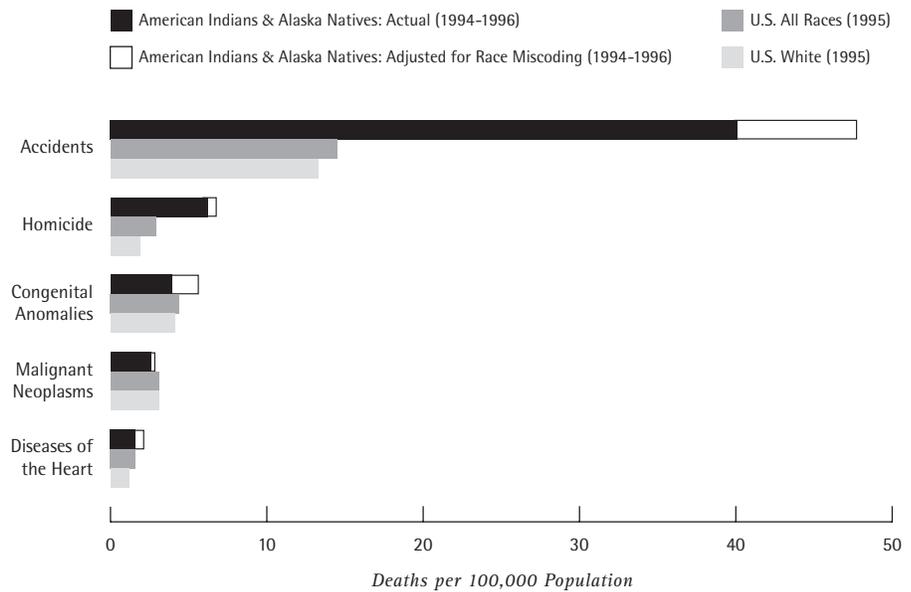
# Part 4

## General Mortality Statistics

**Chart 4.1**

*Death Rates,  
Leading Causes:  
Ages 1 to 4 Years*

The two leading causes of death for American Indians and Alaska Natives, ages 1 to 4 (1994-1996), were accidents and homicide. For the U.S. All Races and White populations (1995), they were accidents and congenital anomalies.



**Table 4.1**

*Ten Leading Causes of Death for Decedents 1 to 4 Years of Age*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995 (Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native Number		American Indian & Alaska Native Rate		U.S. All Races Rate	U.S. White Rate	Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>			U.S. All Races	U.S. White
All Causes	297	353	76.8	91.3	40.6	35.1	2.2	2.6
Accidents	155	183	40.1	47.4	14.5	13.3	3.3	3.6
Motor vehicle	69	76	17.9	19.7	5.2	4.9	3.8	4.0
Other accidents	86	107	22.3	27.7	9.2	8.4	3.0	3.3
Homicide and legal intervention	24	25	6.2	6.5	2.9	1.9	2.2	3.4
Congenital anomalies	15	22	3.9	5.7	4.4	4.1	1.3	1.4
Malignant neoplasms	10	11	2.6	2.8	3.1	3.1	0.9	0.9
Diseases of the heart	6	8	1.6	2.1	1.6	1.2	1.3	1.8
Pneumonia and influenza	6	7	1.6	1.8	1.0	0.7	1.8	2.6
Certain conditions originating in the perinatal period	5	7	1.3	1.8	0.6	0.4	3.0	4.5
Chronic obstructive pulmonary diseases and allied conditions	3	3	0.8	0.8	0.2	0.2	4.0	4.0
Acute bronchitis and bronchiolitis	2	3	0.5	0.8	0.2	0.1	4.0	8.0
Cerebrovascular diseases	2	3	0.5	0.8	0.4	0.3	2.0	2.7
All other causes	69	81						

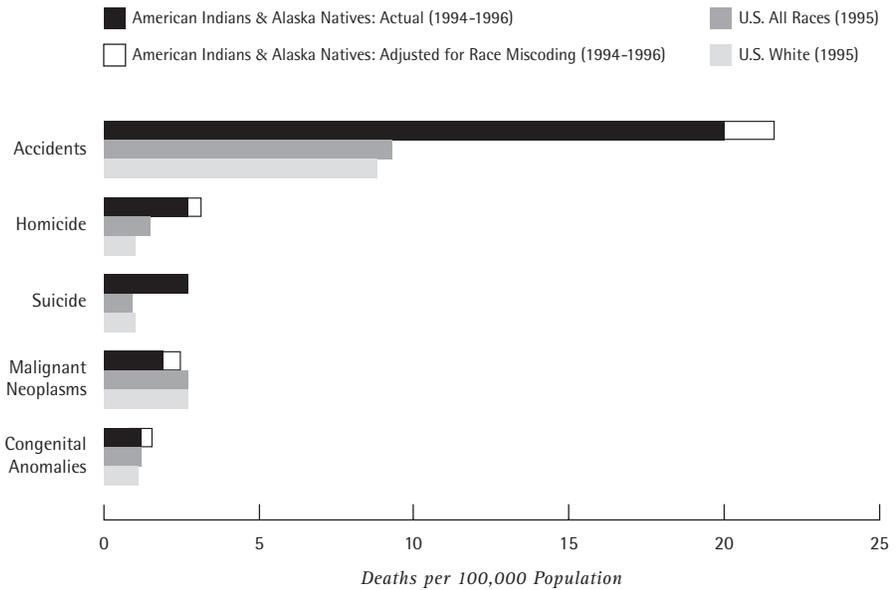
<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates. **Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4 General Mortality Statistics**

**Chart 4.2**

*Death Rates,  
Leading Causes:  
Ages 5 to 14 Years*

The two leading causes of death for American Indians and Alaska Natives, ages 5 to 14 (1994-1996), were accidents and homicide. For the U.S. All Races and White populations (1995), they were accidents and malignant neoplasms.



**Table 4.2**

*Ten Leading Causes of Death for Decedents 5 to 14 Years of Age*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995 (Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native Number		American Indian & Alaska Native Rate		U.S. All Races Rate	U.S. White Rate	Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>			U.S. All Races	U.S. White
All Causes	329	366	37.2	41.4	22.5	20.6	1.8	2.0
Accidents	177	191	20.0	21.6	9.3	8.8	2.3	2.5
Motor vehicle	94	103	10.6	11.7	5.4	5.3	2.2	2.2
Other accidents	83	88	9.4	10.0	3.9	3.5	2.6	2.9
Homicide and legal intervention	24	29	2.7	3.3	1.5	1.0	2.2	3.3
Suicide	24	24	2.7	2.7	0.9	1.0	3.0	2.7
Malignant neoplasms	17	22	1.9	2.5	2.7	2.7	0.9	0.9
Congenital anomalies	11	14	1.2	1.6	1.2	1.1	1.3	1.5
Diseases of the heart	6	9	0.7	1.0	0.8	0.6	1.3	1.7
Pneumonia and influenza	6	9	0.7	1.0	0.3	0.3	3.3	3.3
Septicemia	4	4	0.5	0.5	0.1	0.1	5.0	5.0
Chronic obstructive pulmonary diseases and allied conditions	3	4	0.3	0.5	0.4	0.2	1.3	2.5
Meningococcal infection	3	3	0.3	0.3	0.1	0.1	3.0	3.0
All other causes	54	57						

<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates.

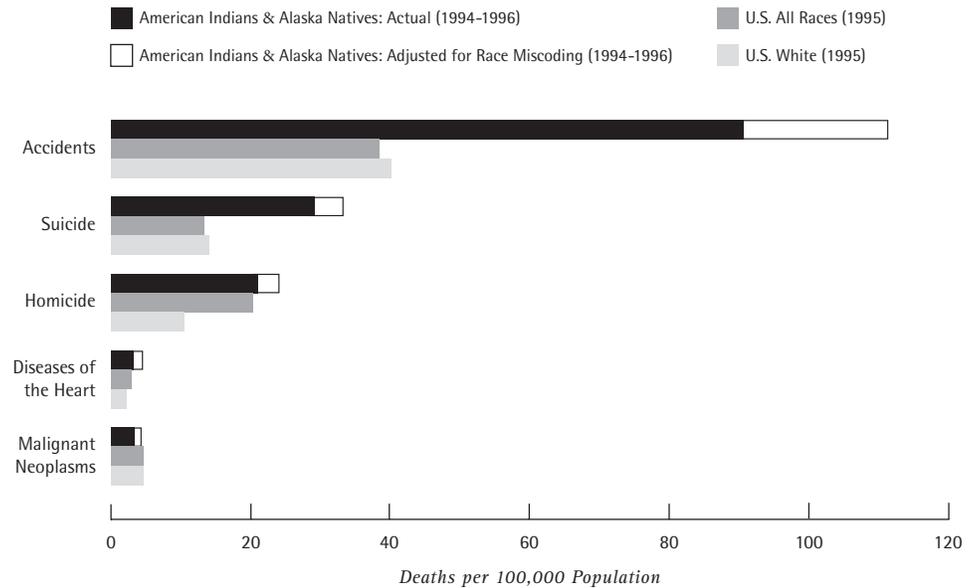
**Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4 General Mortality Statistics**

**Chart 4.3**

*Death Rates,  
Leading Causes:  
Ages 15 to 24 Years*

The two leading causes of death for American Indians and Alaska Natives, ages 15 to 24 years (1994-1996), and U.S. Whites (1995) were accidents and suicide. For the U.S. All Races (1995), they were accidents and homicide.



**Table 4.3**

*Ten Leading Causes of Death for Decedents 15 to 24 Years of Age*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995 (Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native		Rate		U.S. All Races Rate	U.S. White Rate	Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Actual Number	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>			U.S. All Races	U.S. White
All Causes	1,191	1,433	163.3	196.5	95.3	84.3	2.1	2.3
Accidents	661	817	90.6	112.0	38.5	40.2	2.9	2.8
Motor vehicle	500	629	68.6	86.2	29.5	31.1	2.9	2.8
Other accidents	161	188	22.1	25.8	9.0	9.1	2.9	2.8
Suicide	212	247	29.1	33.9	13.4	14.0	2.5	2.4
Homicide and legal intervention	153	176	21.0	24.1	20.3	10.5	1.2	2.3
Diseases of the heart	23	31	3.2	4.3	2.9	2.2	1.5	2.0
Malignant neoplasms	25	28	3.4	3.8	4.6	4.6	0.8	0.8
Congenital anomalies	6	7	0.8	1.0	1.3	1.2	0.8	0.8
Cerebrovascular diseases	5	5	0.7	0.7	0.5	0.4	1.4	1.8
Pneumonia and influenza	4	5	0.5	0.7	0.6	0.5	1.2	1.4
Human immunodeficiency virus (HIV) infection	4	5	0.5	0.7	1.8	1.0	0.4	0.7
Septicemia	4	4	0.5	0.5	0.2	0.2	2.5	2.5
All other causes	94	108						

<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates.

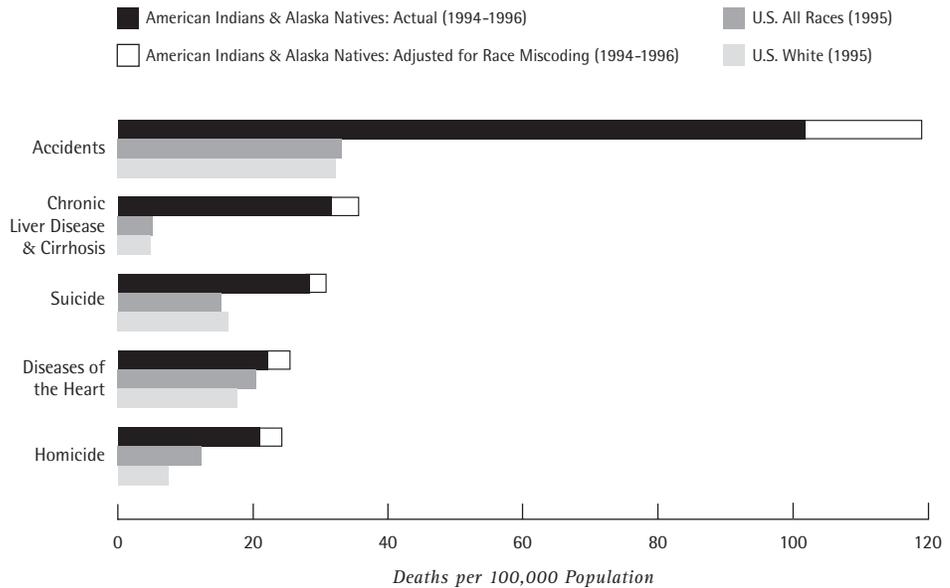
**Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4 General Mortality Statistics**

**Chart 4.4**

*Death Rates,  
Leading Causes:  
Ages 25 to 44 Years*

The two leading causes of death for American Indians and Alaska Natives, ages 25 to 44 years (1994-1996), were accidents and chronic liver disease and cirrhosis. For the U.S. All Races population (1995) and the U.S. White population (1995) they were accidents and human immunodeficiency virus (HIV) infection. HIV infection was seventh for Indians.



**Table 4.4**

*Ten Leading Causes of Death for Decedents 25 to 44 Years of Age*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995 (Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native Number		American Indian & Alaska Native Rate		U.S. All Races Rate	U.S. White Rate	Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>			U.S. All Races	U.S. White
All Causes	3,848	4,435	316.2	364.4	192.0	165.5	1.9	2.2
Accidents	1,239	1,439	101.8	118.2	33.2	32.3	3.6	3.7
Motor vehicle	745	881	61.2	72.4	17.5	17.3	4.1	4.2
Other accidents	494	558	40.6	45.8	15.6	15.0	2.9	3.1
Chronic liver disease and cirrhosis	384	437	31.6	35.9	5.2	4.9	6.9	7.3
Suicide	346	387	28.4	31.8	15.3	16.4	2.1	1.9
Diseases of the heart	270	310	22.2	25.5	20.5	17.7	1.2	1.4
Homicide and legal intervention	256	293	21.0	24.1	12.4	7.5	1.9	3.2
Malignant neoplasms	238	280	19.6	23.0	26.4	25.2	0.9	0.9
Human immunodeficiency virus (HIV) infection	160	191	13.1	15.7	36.9	26.6	0.4	0.6
Pneumonia and influenza	89	99	7.3	8.1	2.5	2.0	3.2	4.1
Diabetes mellitus	81	92	6.7	7.6	3.0	2.6	2.5	2.9
Cerebrovascular diseases	76	88	6.2	7.2	4.2	3.2	1.7	2.3
All other causes	709	819						

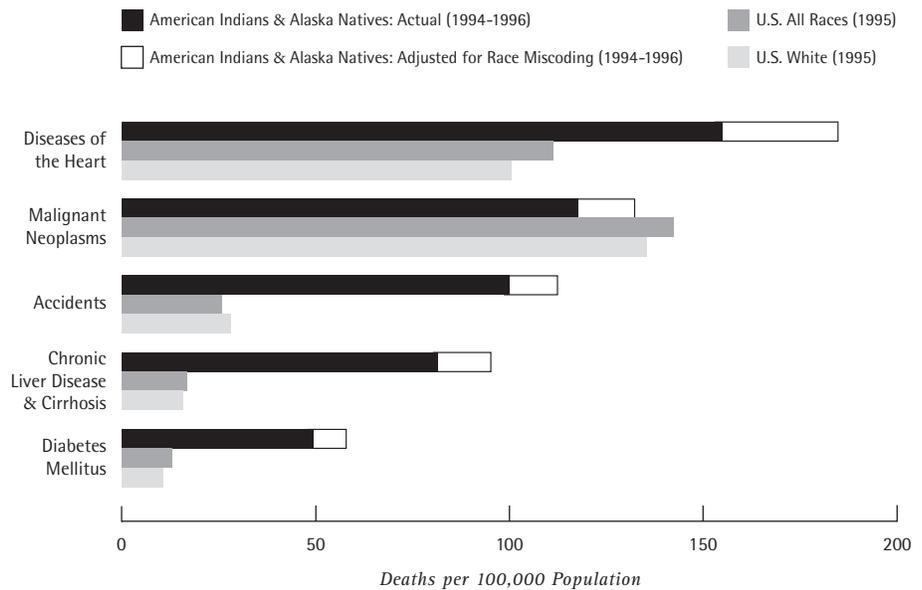
<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates. **Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4 General Mortality Statistics**

**Chart 4.5**

*Death Rates,  
Leading Causes:  
Ages 45 to 54 Years*

The two leading causes of death for American Indians and Alaska Natives, ages 45 to 54 years (1994-1996), were diseases of the heart and malignant neoplasms. This ranking was in reverse order for the U.S. All Races and White populations (1995).



**Table 4.5**

*Ten Leading Causes of Death for Decedents 45 to 54 Years of Age*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995 (Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native Number		American Indian & Alaska Native Rate		U.S. All Races Rate	U.S. White Rate	Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>			U.S. All Races	U.S. White
All Causes	2,453	2,798	754.1	860.1	460.1	413.0	1.9	2.1
Diseases of the heart	504	594	154.9	182.6	111.3	100.4	1.6	1.8
Malignant neoplasms	383	425	117.7	130.7	142.3	135.4	0.9	1.0
Accidents	325	366	99.9	112.5	25.8	28.1	4.4	4.0
Motor vehicle	171	194	52.6	59.6	10.0	13.6	6.0	4.4
Other accidents	154	172	47.3	52.9	15.9	14.5	3.3	3.6
Chronic liver disease and cirrhosis	265	308	81.5	94.7	16.9	15.8	5.6	6.0
Diabetes mellitus	161	192	49.5	59.0	12.9	10.7	4.6	5.5
Cerebrovascular diseases	88	100	27.1	30.7	17.7	13.8	1.7	2.2
Pneumonia and influenza	53	57	16.3	17.5	6.7	5.5	2.6	3.2
Suicide	51	54	15.7	16.6	14.6	15.9	1.1	1.0
Homicide and legal intervention	38	42	11.7	12.9	6.2	4.4	2.1	2.9
Septicemia	31	34	9.5	10.5	3.1	2.4	3.4	4.4
All other causes	554	626						

<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates.

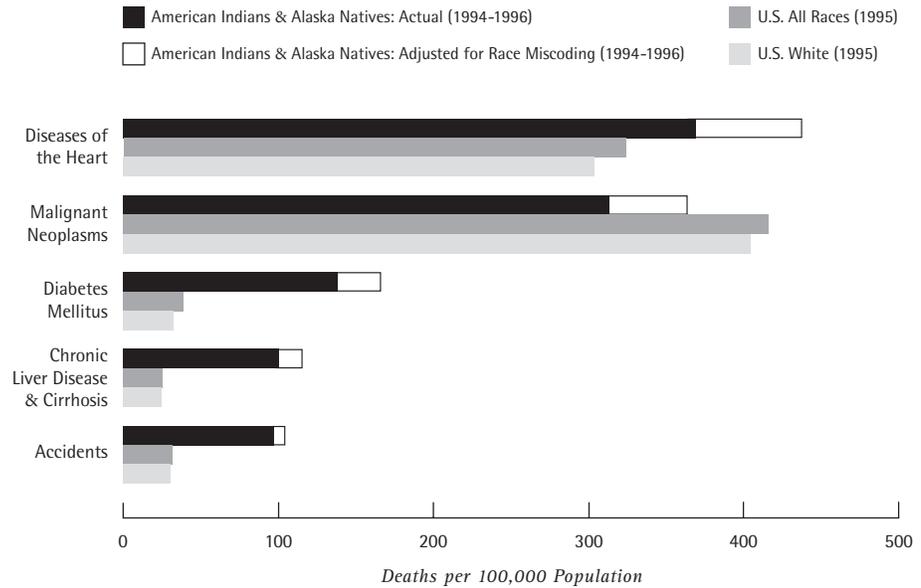
**Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4 General Mortality Statistics**

**Chart 4.6**

*Death Rates,  
Leading Causes:  
Ages 55 to 64 Years*

The two leading causes of death for American Indians and Alaska Natives, ages 55 to 64 years (1994-1996), were diseases of the heart and malignant neoplasms. This ranking was in reverse order for the U.S. All Races and White populations (1995).



**Table 4.6**

*Ten Leading Causes of Death for Decedents 55 to 64 Years of Age*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995 (Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native		U.S. All Races		U.S. White		Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Number Actual	Rate Adj <sup>1</sup>	Number Actual	Rate Adj <sup>1</sup>	Rate	Rate	U.S. All Races	U.S. White
All Causes	3,132	3,616	1,401.0	1,617.5	1,114.5	1,049.1	1.5	1.5
Diseases of the heart	826	982	369.5	439.2	324.1	303.9	1.4	1.4
Malignant neoplasms	701	815	313.6	364.5	416.4	404.7	0.9	0.9
Diabetes mellitus	309	375	138.2	167.7	38.8	32.6	4.3	5.1
Chronic liver disease and cirrhosis	225	257	100.6	115.0	25.4	24.5	4.5	4.7
Accidents	217	234	97.0	104.7	31.9	30.4	3.3	3.4
Motor vehicle	95	104	42.5	46.5	14.6	14.4	3.2	3.2
Other accidents	122	130	54.6	58.2	17.3	16.0	3.4	3.6
Cerebrovascular diseases	106	117	47.4	52.3	46.2	39.0	1.1	1.3
Chronic obstructive pulmonary diseases and allied conditions	75	85	33.5	38.0	47.3	48.6	0.8	0.8
Pneumonia and influenza	70	74	31.3	33.1	9.9	14.7	3.3	2.3
Nephritis, nephrotic syndrome, and nephrosis	45	47	20.1	21.0	8.2	6.4	2.6	3.3
Septicemia	32	34	14.3	15.2	8.2	6.8	1.9	2.2
All other causes	526	596						

<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates.

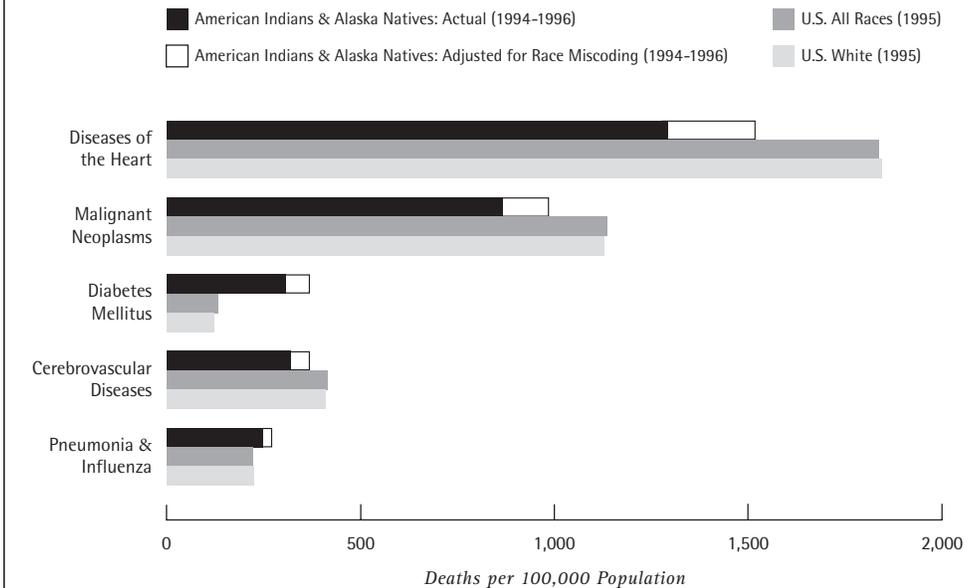
**Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4 General Mortality Statistics**

**Chart 4.7**

*Death Rates, Leading Causes: Ages 65+ Years*

The two leading causes of death for American Indians and Alaska Natives, ages 65 and over (1994-1996), were diseases of the heart and malignant neoplasms. For the U.S. All Races and White populations (1995), they were also diseases of the heart and malignant neoplasms.



**Table 4.7**

*Ten Leading Causes of Death for Decedents 65 Years Old and Older*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995 (Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native		U.S. All Races		U.S. White		Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Number	Rate	Number	Rate	Number	Rate	U.S. All Races	U.S. White
All Causes	10,127	11,368	4,313.6	4,842.2	5,052.8	5,049.3	1.0	1.0
Diseases of the heart	3,036	3,527	1,293.2	1,502.3	1,837.4	1,843.7	0.8	0.8
Malignant neoplasms	2,036	2,296	867.2	978.0	1,137.2	1,129.4	0.9	0.9
Diabetes mellitus	722	831	307.5	354.0	132.7	122.5	2.7	2.9
Cerebrovascular diseases	750	829	319.5	353.1	414.2	410.0	0.9	0.9
Pneumonia and influenza	580	622	247.1	264.9	221.7	224.5	1.2	1.2
Chronic obstructive pulmonary diseases and allied conditions	451	495	192.1	210.8	263.9	276.0	0.8	0.8
Accidents	277	289	118.0	123.1	86.8	87.0	1.4	1.4
Motor vehicle	80	83	34.1	35.4	22.7	22.8	1.6	1.6
Other accidents	197	206	83.9	87.7	64.0	64.1	1.4	1.4
Nephritis, nephrotic syndrome, and nephrosis	197	216	83.9	92.0	60.2	56.3	1.5	1.6
Chronic liver disease and cirrhosis	162	177	69.0	75.4	30.5	31.2	2.5	2.4
Septicemia	140	149	59.6	63.5	50.4	46.9	1.3	1.4
All other causes	1,776	1,937						

<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates.

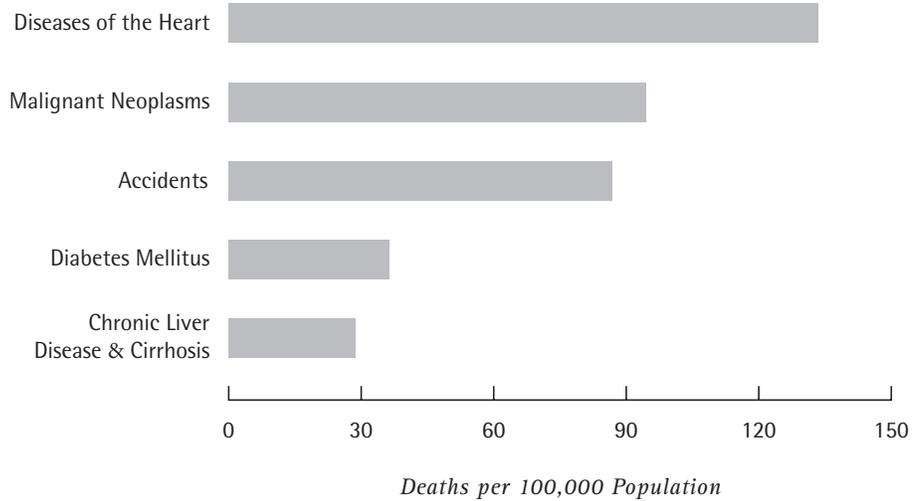
**Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4** General Mortality Statistics

**Chart 4.8**

*Death Rates for Leading Causes, Indians and Alaska Natives (1994-1996)*

The two leading causes of death for American Indians and Alaska Natives (1994-1996) and the U.S. All Races and White populations (1995) were diseases of the heart and malignant neoplasms.



**Table 4.8**

*Ten Leading Causes of Death for Decedents of All Ages*

American Indians and Alaska Natives, IHS Service Area, 1994-1996 (Rate per 100,000 Population)

Cause of Death	Number		Rate	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
All Causes	22,143	25,304	539.1	616.0
Diseases of the heart	4,688	5,482	114.1	133.5
Malignant neoplasms	3,413	3,879	83.1	94.4
Accidents	3,093	3,565	75.3	86.8
Motor vehicle	1,767	2,083	43.0	50.7
Other accidents	1,326	1,482	32.3	36.1
Diabetes mellitus	1,274	1,491	31.0	36.3
Chronic liver disease and cirrhosis	1,040	1,183	25.3	28.8
Cerebrovascular diseases	1,029	1,143	25.1	27.8
Pneumonia and influenza	840	912	20.4	22.2
Suicide	672	753	16.4	18.3
Chronic obstructive pulmonary diseases	574	632	14.0	15.4
Homicide and legal intervention	535	610	13.0	14.9
All other causes	4,985	5,654		

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

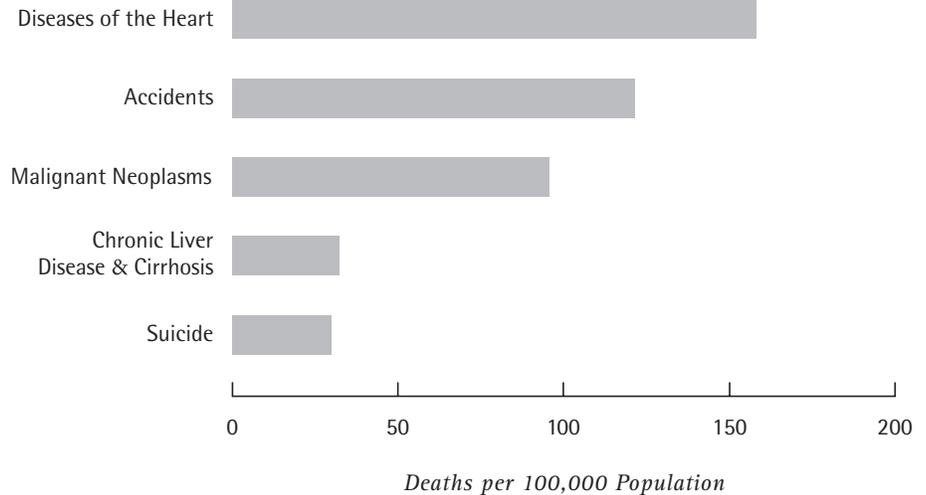
**Note:** Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4** *General Mortality Statistics*

**Chart 4.9**

*Death Rates for Leading Causes: Males, Indians and Alaska Natives (1994-1996)*

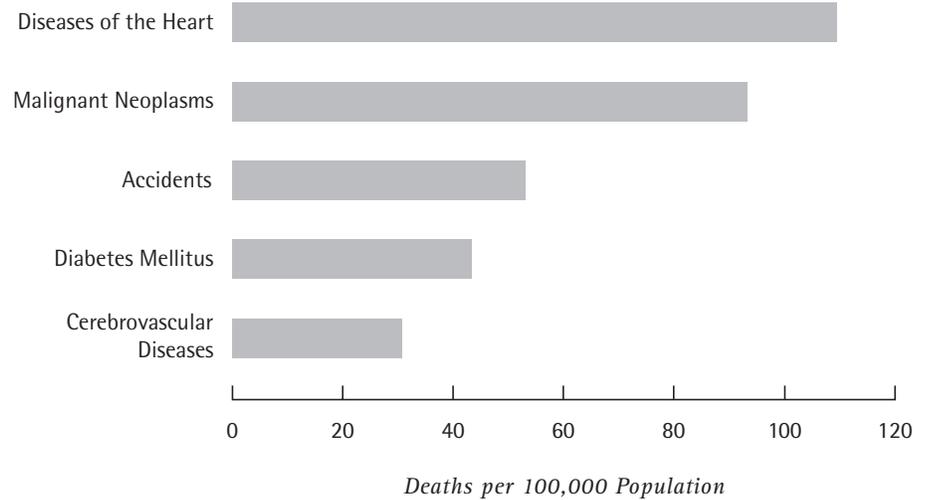
The two leading causes of death for Indian males (1994-1996) were diseases of the heart and accidents. For U.S. All Races and White males (1995), they were diseases of the heart and malignant neoplasms.



**Chart 4.10**

*Death Rates for Leading Causes: Females, Indians and Alaska Natives (1994-1996)*

The two leading causes of death for Indian females (1994-1996) were diseases of the heart and malignant neoplasms. The same was true for U.S. All Races and White females in 1995.



Part 4 General Mortality Statistics

Table 4.9

Leading Causes of Death by Sex

American Indians and Alaska Natives, IHS Service Area, 1994-1996  
(Rate per 100,000 Population)

MALE

Cause of Death	Number		Rate	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
All Causes	12,452	14,185	615.2	700.9
Diseases of the heart	2,704	3,202	133.6	158.2
Accidents	2,172	2,460	107.3	121.5
Motor vehicle	1,186	1,361	58.6	67.2
Other accidents	986	1,099	48.7	54.3
Malignant neoplasms	1,709	1,936	84.4	95.7
Chronic liver disease and cirrhosis	582	654	28.8	32.3
Suicide	548	604	27.1	29.8
Diabetes mellitus	514	587	25.4	29.0
Cerebrovascular diseases	454	501	22.4	24.8
Pneumonia and influenza	458	500	22.6	24.7
Homicide and legal intervention	415	468	20.5	23.1
Chronic obstructive pulmonary diseases and allied conditions	299	332	14.8	16.4
All other causes	2,597	2,941		

FEMALE

Cause of Death	Number		Rate	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
All Causes	9,691	11,119	465.1	533.6
Diseases of the heart	1,984	2,280	95.2	109.4
Malignant neoplasms	1,704	1,943	81.8	93.2
Accidents	921	1,105	44.2	53.0
Motor vehicle	581	722	27.9	34.6
Other accidents	340	383	16.3	18.4
Diabetes mellitus	760	904	36.5	43.4
Cerebrovascular diseases	575	642	27.6	30.8
Chronic liver disease and cirrhosis	458	529	22.0	25.4
Pneumonia and influenza	382	412	18.3	19.8
Chronic obstructive pulmonary diseases and allied conditions	275	300	13.2	14.4
Nephritis, nephrotic syndrome, and nephrosis	150	160	7.2	7.7
Suicide	124	149	6.0	7.2
All other causes	2,358	2,695		

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

**Note:** Causes of death are listed based upon the order of adjusted number of deaths. During 1994-1996 there were 158 male deaths and 46 female deaths (adjusted counts) due to HIV infection among the American Indian and Alaska Native population residing in the IHS service delivery area.

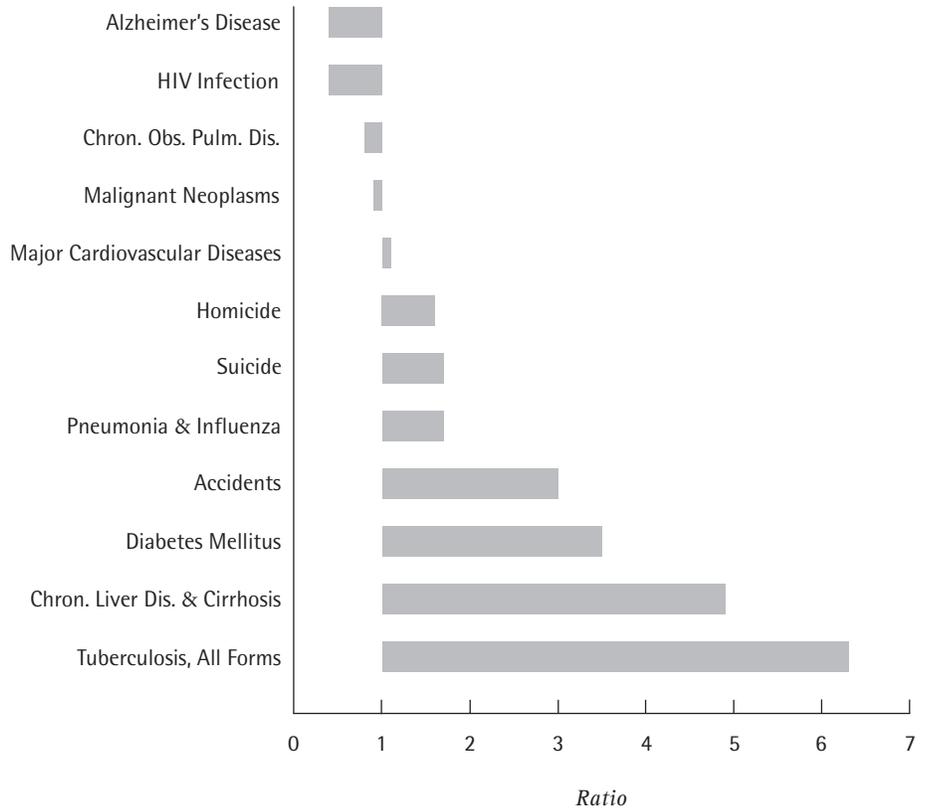
**Part 4** *General Mortality Statistics*

**Chart 4.11**

*Selected Age-Adjusted Death Rates, Ratio of Indians (1994-96) to U.S. All Races (1995)*

The American Indian and Alaska Native age-adjusted death rates for 1994-1996 were more than triple those of the U.S. All Races (1995) for tuberculosis (6.3 times), chronic liver disease and cirrhosis (4.9 times), diabetes (3.5 times), and accidents (3.0 times). Indian rates were below those of the U.S. All Races for Alzheimer's Disease (.4 times), HIV infection (.4 times), chronic obstructive pulmonary diseases (.8 times), and malignant neoplasms (.9 times).

These Indian rates have been adjusted for miscoding of Indian race on death certificates.



## Part 4 General Mortality Statistics

**Table 4.11**

### Age-Adjusted Death Rates

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

Cause of Death	American Indian & Alaska Native		U.S. All Races	U.S. White	Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Actual	Adj <sup>1</sup>			U.S. All Races	U.S. White
All Causes	609.8	699.3	503.9	476.9	1.4	1.5
Major cardiovascular diseases	168.3	195.7	174.9	167.2	1.1	1.2
Diseases of the heart	132.4	156.0	138.3	133.1	1.1	1.2
Cerebrovascular diseases	27.2	30.5	26.7	24.7	1.1	1.2
Atherosclerosis	2.6	2.8	2.3	2.3	1.2	1.2
Hypertension	2.1	2.1	2.3	1.8	0.9	1.2
Accidents	80.6	92.6	30.5	29.9	3.0	3.1
Motor vehicle	45.9	54.0	16.3	16.4	3.3	3.3
All other	34.7	38.6	14.2	13.5	2.7	2.9
Malignant neoplasms	102.1	116.6	129.9	127.0	0.9	0.9
Chronic liver disease and cirrhosis	32.6	37.2	7.6	7.4	4.9	5.0
Diabetes mellitus	39.4	46.4	13.3	11.7	3.5	4.0
Pneumonia and influenza	20.2	22.0	12.9	12.4	1.7	1.8
Suicide	17.3	19.3	11.2	11.9	1.7	1.6
Homicide	13.5	15.3	9.4	5.5	1.6	2.8
Chronic obstructive pulmonary diseases and allied conditions	15.6	17.3	20.8	21.3	0.8	0.8
Tuberculosis, all forms	1.9	1.9	0.3	0.2	6.3	9.5
Human immunodeficiency virus (HIV) infection	5.3	6.2	15.6	11.1	0.4	0.6
Alzheimer's disease	1.0	1.2	2.7	2.8	0.4	0.4

<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates.

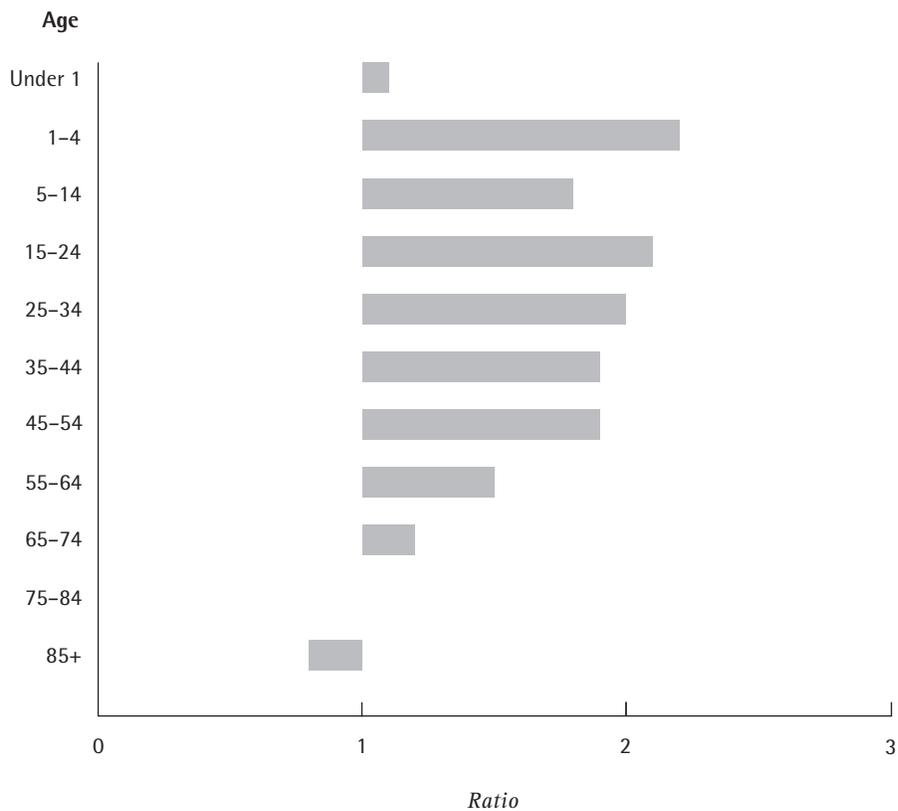
**Source:** U.S. Mortality Rates: Monthly Vital Statistics Report, NCHS, DHHS, Advance Report of Final Mortality Statistics, 1995, Vol. 45, No. 11, Supplement 2, June 12, 1997, Table 12.

Part 4 General Mortality Statistics

Chart 4.12

*Age-Specific Death Rates, Ratio of Indians and Alaska Natives (1994-1996) to U.S. All Races (1995)*

The age-specific death rate for American Indians and Alaska Natives (1994-1996) was more than double the U.S. All Races rate (1995) for age groups 1 to 4 and 15 through 34. The Indian rate was less than the U.S. All Races rate for only one age group, 85 years and older. These Indian rates have been adjusted for miscoding of Indian race on death certificates.

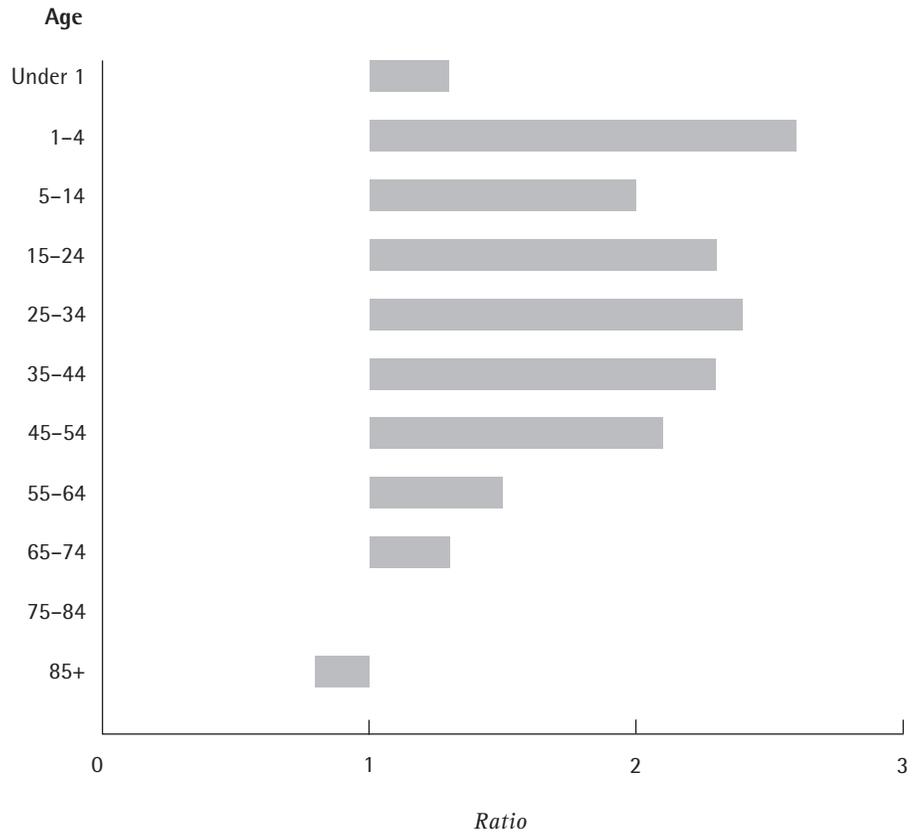


Part 4 General Mortality Statistics

Chart 4.13

*Age-Specific Death Rates, Ratio of Indians and Alaska Natives (1994-1996) to U.S. White (1995)*

The age-specific death rate for American Indians and Alaska Natives (1994-1996) was more than double the U.S. White rate (1995) for age groups 1 to 4 and 15 through 54. The Indian rate was less than the U.S. White rate for only one age group, 85 years and older. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.12**

*Age-Specific Death Rates*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and Selected U.S. Populations, 1995  
(Rate per 100,000 Population)

Age Group	American Indian & Alaska Native				U.S. Rate			Ratio <sup>1</sup> of American Indian & Alaska Native to:	
	Number		Rate		All Races	White	Black	U.S. All Races	U.S. White
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>					
Under 1	753	922	699.1	856.0	768.8	646.5	1,467.9	1.1	1.3
1-4	297	353	76.8	91.3	40.6	35.1	70.3	2.2	2.6
5-14	329	366	37.2	41.4	22.5	20.6	33.4	1.8	2.0
15-24	1,191	1,433	163.3	196.5	95.3	84.3	159.8	2.1	2.3
25-34	1,712	2,003	246.2	288.0	141.3	121.5	284.9	2.0	2.4
35-44	2,136	2,432	409.4	466.2	240.8	207.0	511.3	1.9	2.3
45-54	2,453	2,798	754.1	860.2	460.1	413.0	915.3	1.9	2.1
55-64	3,132	3,616	1,400.9	1,617.4	1,114.5	1,049.1	1,823.2	1.5	1.5
65-74	4,032	4,629	2,777.2	3,188.5	2,563.5	2,495.3	3,568.2	1.2	1.3
75-84	3,705	4,252	5,291.6	6,072.9	5,851.8	5,801.4	6,911.1	1.0	1.0
85+	2,390	2,487	12,207.0	12,702.4	15,469.5	15,616.3	14,413.3	0.8	0.8

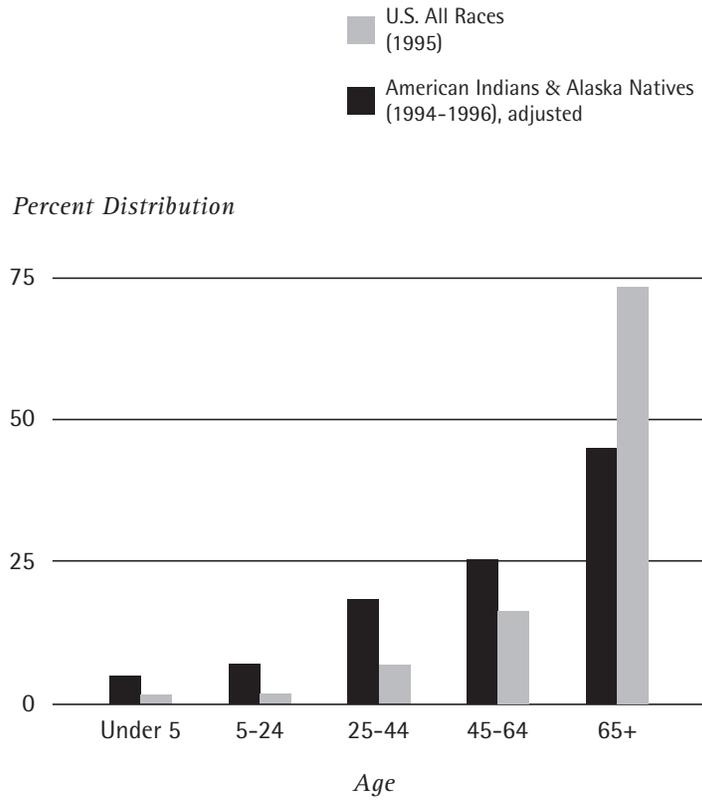
<sup>1</sup>Adjusted to compensate for miscoding of Indian race on death certificates.

Part 4 General Mortality Statistics

Chart 4.14

Deaths by Age

Of all American Indian and Alaska Native people who died during 1994-1996, 30 percent were under 45 years of age. This Indian death count has been adjusted for miscoding of Indian race on death certificates. This compared to 10 percent for the U.S. All Races population (1995).

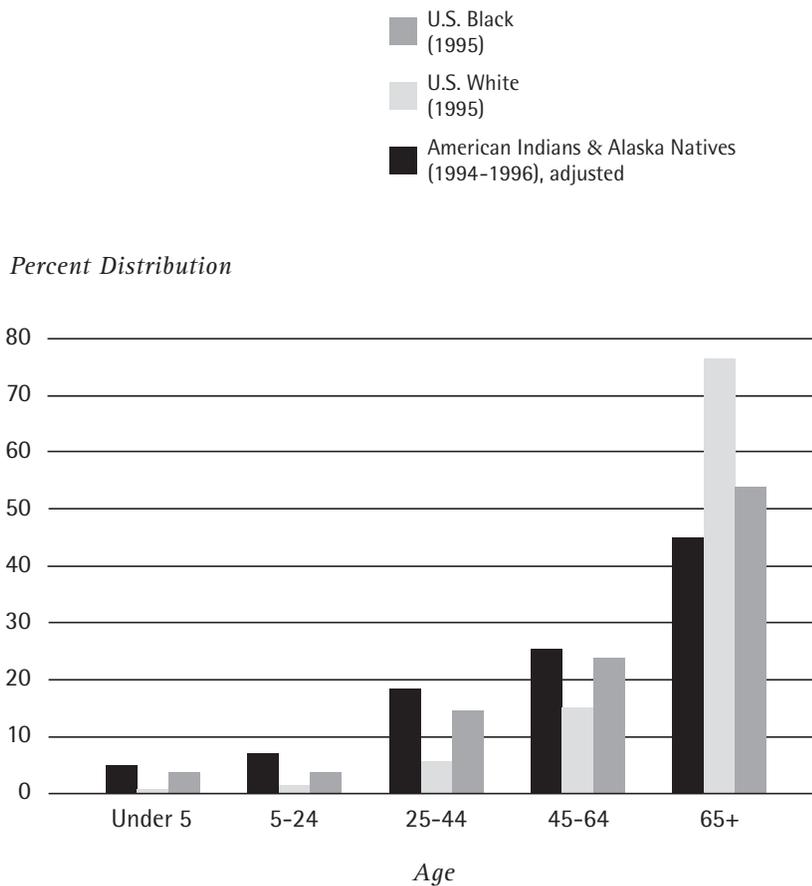


Part 4 General Mortality Statistics

Chart 4.15

Deaths by Age and Race

Twenty-two (22) percent of Black decedents and 8 percent of White decedents in 1995 were under 45 years of age.

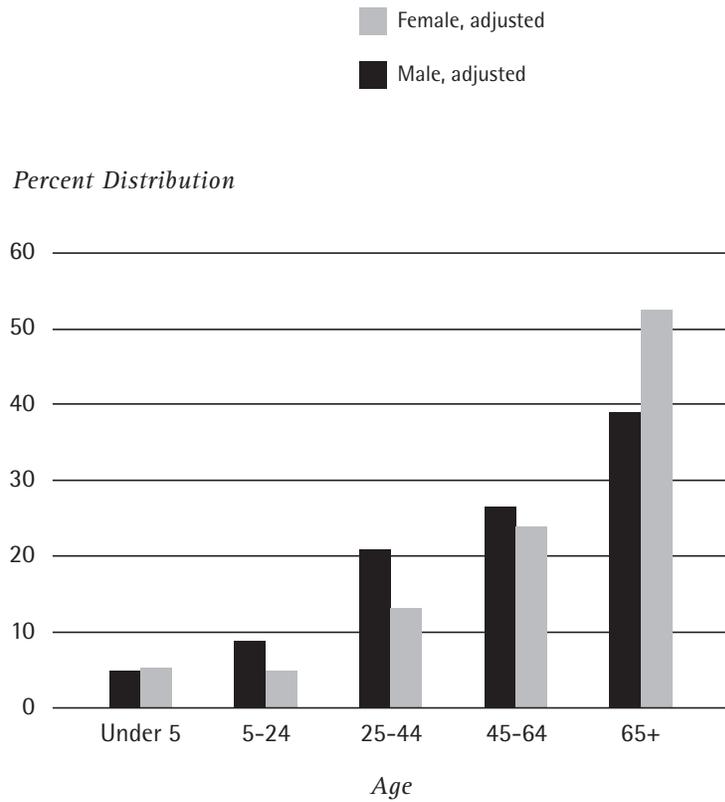


Part 4 General Mortality Statistics

Chart 4.16

*Deaths by Age and Sex,  
Indians and Alaska Native  
(1994-1996)*

Thirty-five (35) percent of Indian male deaths (1994-1996) pertained to ages under 45. This compared with 23 percent for Indian female deaths. These Indian death counts have been adjusted for miscoding of Indian race on death certificates.



**Part 4 General Mortality Statistics**

**Table 4.14**

*Number and Percent Distribution of Deaths by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and Selected U.S. Populations, 1995

Age Group	American Indian and Alaska Native											
	Both Sexes				Male				Female			
	Number		Percent		Number		Percent		Number		Percent	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
All Ages	22,143	25,304	100.0	100.0	12,452	14,185	100.0	100.0	9,691	11,119	100.0	100.0
Under 1 year	753	922	3.4	3.6	395	492	3.2	3.5	358	430	3.7	3.9
1 to 4	297	353	1.3	1.4	166	197	1.3	1.4	131	156	1.4	1.4
5 to 14	329	366	1.5	1.4	195	216	1.6	1.5	134	150	1.4	1.3
15 to 24	1,191	1,433	5.4	5.7	895	1,029	7.2	7.3	296	404	3.1	3.6
25 to 34	1,712	2,003	7.7	7.9	1,208	1,368	9.7	9.6	504	635	5.2	5.7
35 to 44	2,136	2,432	9.6	9.6	1,436	1,597	11.5	11.3	700	835	7.2	7.5
45 to 54	2,453	2,798	11.1	11.1	1,496	1,683	12.0	11.9	957	1,115	9.9	10.0
55 to 64	3,132	3,616	14.1	14.3	1,807	2,072	14.5	14.6	1,325	1,544	13.7	13.9
65 to 74	4,032	4,629	18.2	18.3	2,164	2,489	17.4	17.5	1,868	2,140	19.3	19.2
75 to 84	3,705	4,252	16.7	16.8	1,781	2,079	14.3	14.7	1,924	2,173	19.9	19.5
85 and over	2,390	2,487	10.8	9.8	900	954	7.2	6.7	1,490	1,533	15.4	13.8
Age not stated	13	13	0.1	0.1	9	9	0.1	0.1	4	4	0.0	0.0

United States			
Age Group	All Races	White	Black
Number of Deaths, All Ages	2,312,132	1,987,437	286,401
Percent Distribution, All Ages	100.0	100.0	100.0
Under 1	1.3	0.6	3.2
1 to 4	0.3	0.2	0.6
5 to 14	0.4	0.3	0.7
15 to 24	1.5	1.2	3.0
25 to 34	2.5	2.0	5.4
35 to 44	4.4	3.7	9.2
45 to 54	6.2	5.5	10.3
55 to 64	10.2	9.6	13.5
65 to 74	20.8	20.9	20.1
75 to 84	28.2	29.5	20.0
85 and over	24.3	26.0	13.8
Age not stated	0.0	0.0	0.0

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

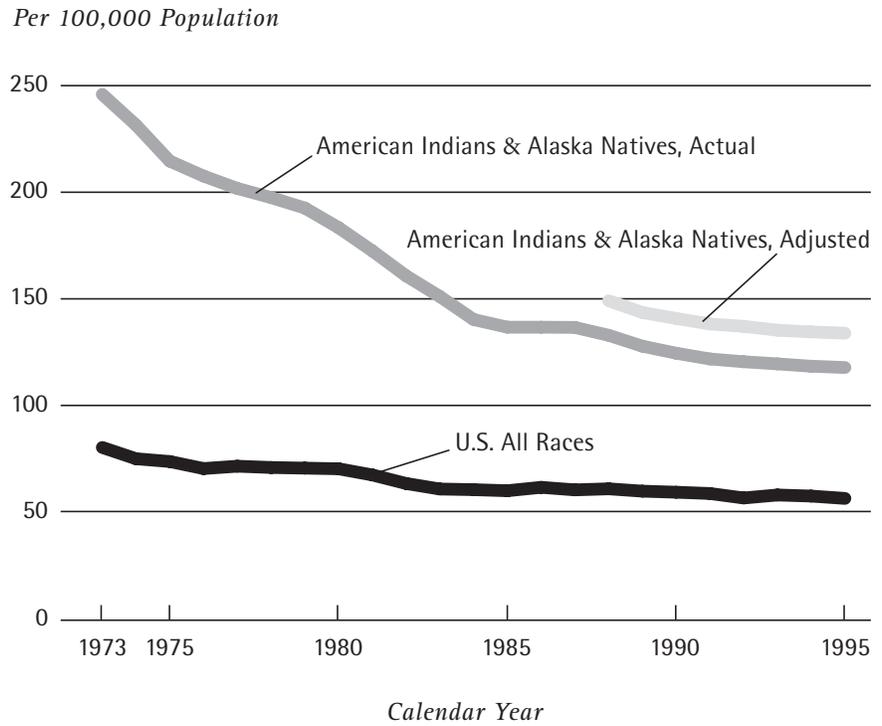
**Note:** 0.0 rounds to zero.

Part 4 General Mortality Statistics

Chart 4.17

Age-Adjusted Injury and Poisoning Death Rates

The American Indian and Alaska Native age-adjusted death rate due to injury and poisoning (accidents, suicide, homicide, and other injuries) in 1994-1996 (129.7 deaths per 100,000 population) is more than half of what it was in 1972-1974 (241.7). The 1994-1996 rate is 2.5 times the U.S. All Races rate of 52.2 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4 General Mortality Statistics**

**Table 4.17**

*Injury and Poisoning<sup>1</sup> Deaths and Death Rates*

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian & Alaska Native Number		Rate		U.S. All Races Rate	U.S. White Rate	Ratio of American Indian & Alaska Native to:			
	Actual	Adj	Actual	Adj			U.S. All Races		U.S. White	
							Actual	Adj	Actual	Adj
(1996)	1,470	1,686								
1994-1996 (1995)	1,450	1,669	113.6	129.7	52.2	49.0	2.2	2.5	2.3	2.6
1993-1995 (1994)	1,464	1,665	114.2	130.3	53.3	48.4	2.1	2.4	2.4	2.7
1992-1994 (1993)	1,403	1,609	115.3	131.1	53.8	48.9	2.1	2.4	2.4	2.7
1991-1993 (1992)	1,369	1,564	116.3	132.9	52.4	48.0	2.2	2.5	2.4	2.8
1990-1992 (1991)	1,397	1,610	117.6	134.0	54.5	49.8	2.2	2.5	2.4	2.7
1989-1991 (1990)	1,349	1,532	120.3	136.6	55.1	50.8	2.2	2.5	2.4	2.7
1988-1990 (1989)	1,367	1,548	123.6	139.4	55.6	50.9	2.2	2.5	2.4	2.7
1987-1989 (1988)	1,391	1,567	128.7	144.9	56.7	52.7	2.3	2.6	2.4	2.7
1986-1988 (1987)	1,390	1,568	132.4		56.2	52.8	2.4		2.5	
1985-1987 (1986)	1,375		132.5		57.4	54.1	2.3		2.4	
1984-1986 (1985)	1,275		132.5		55.8	53.0	2.4		2.5	
1983-1985 (1984)	1,254		136.1		56.3	53.7	2.4		2.5	
1982-1984 (1983)	1,280		146.9		56.6	53.6	2.6		2.7	
1981-1983 (1982)	1,351		156.6		59.2	55.9	2.6		2.8	
1980-1982 (1981)	1,344		168.3		63.2	59.5	2.7		2.8	
1979-1981 (1980)	1,418		179.2		66.1	61.9	2.7		2.9	
1978-1980 (1979)	1,472		188.4		66.4	62.1	2.8		3.0	
1977-1979 (1978)	1,383		193.3		66.7	62.6	2.9		3.1	
1976-1978 (1977)	1,346		197.6		67.3	62.8	2.9		3.1	
1975-1977 (1976)	1,321		203.4		66.2	63.8	3.1		3.2	
1974-1976 (1975)	1,283		210.4		69.5	63.8	3.0		3.3	
1973-1975 (1974)	1,229		227.3		70.8	64.6	3.2		3.5	
1972-1974 (1973)	1,381		241.7		76.1	69.4	3.2		3.5	
(1972)	1,241									
1954-1956 (1955)	2,273		200.3		69.2	51.9	2.9		3.9	

Adj—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

<sup>1</sup>Includes the following deaths and ICD9 codes: Motor vehicle accidents, E810-E825. Other accidents, E800-E807, E826-E949. Suicide, E950-E959. Homicide, E960-E978. Injury undetermined whether accidentally or purposely inflicted, E980-E989 and Injury resulting from operations of war, E990-E999.

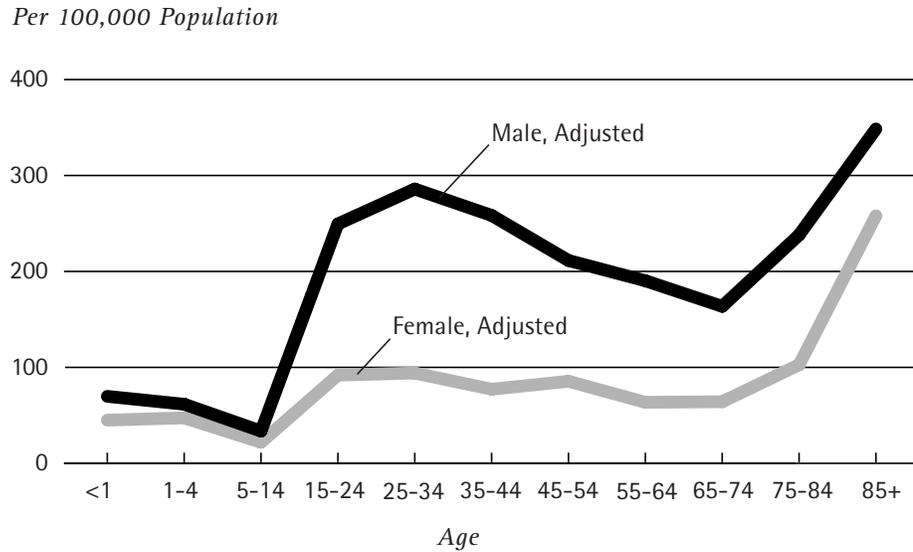
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.18

*Injury and Poisoning Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific death rate due to injury and poisoning for Indian males (1994-1996) was higher for all age groups in comparison with Indian females. The Indian male rate was over 200 deaths per 100,000 population for all age groups except under 15 and 55 to 74 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.18**

*Injury and Poisoning Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	50.1	57.6	55.1	69.8	45.0	45.0
1-4 years	46.8	54.6	52.9	61.6	40.5	47.4
5-14 years	25.7	27.8	31.0	33.6	20.3	21.9
15-24 years	142.5	172.3	216.0	249.5	65.8	91.9
25-34 years	161.4	188.0	251.0	285.9	75.5	94.1
35-44 years	146.3	164.8	231.9	258.4	66.1	77.2
45-54 years	131.0	145.7	193.4	211.4	73.7	85.5
55-64 years	114.5	122.6	114.5	190.3	59.4	63.6
65-74 years	104.7	108.1	104.7	163.6	64.2	64.2
75-84 years	145.7	157.1	145.7	238.0	97.9	102.7
85 years +	291.1	291.1	291.1	348.5	258.0	258.0

U.S. All Races			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	30.1		28.3
1-4 years	18.3		14.9
5-14 years	11.8		8.3
15-24 years	73.6		30.4
25-34 years	65.7		28.0
35-44 years	61.3		28.7
45-54 years	52.3		25.8
55-64 years	50.6		27.5
65-74 years	64.6		40.8
75-84 years	123.2		86.6
85 years +	294.9		238.7

U.S. White			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	24.7		22.1
1-4 years	15.5		13.1
5-14 years	10.9		7.7
15-24 years	65.9		29.7
25-34 years	59.8		25.8
35-44 years	57.5		26.9
45-54 years	49.6		25.1
55-64 years	48.7		26.9
65-74 years	63.1		40.2
75-84 years	123.2		86.7
85 years +	301.0		244.2

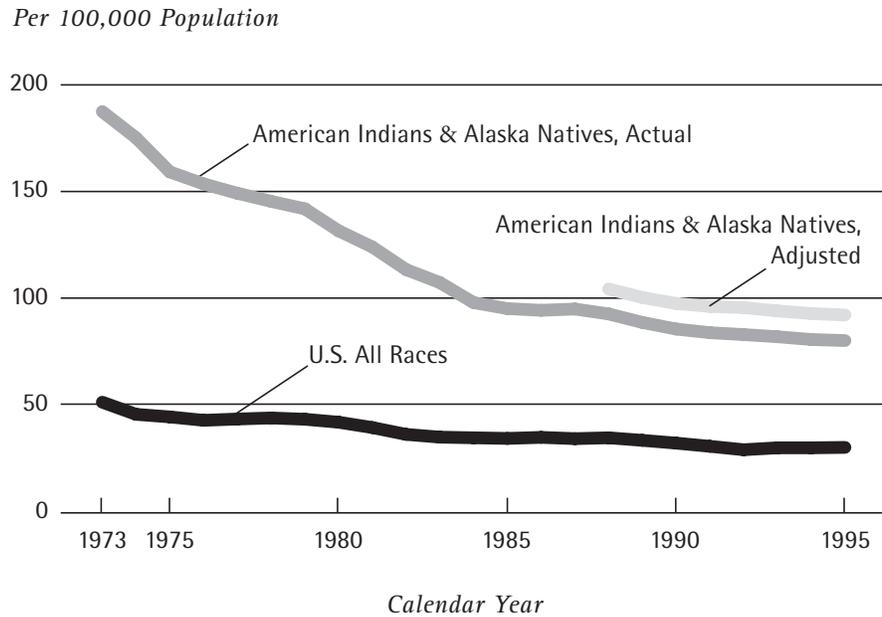
<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

Part 4 General Mortality Statistics

Chart 4.19

Age-Adjusted  
Accident Death Rates

The age-adjusted accident death rate for American Indians and Alaska Natives has decreased over 51 percent since 1972-1974, 188.0 to 92.6. However, during the last ten years the decline has slowed to about 2 percent. The 1994-1996 rate is more than triple the U.S. All Races rate of 30.5 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



## Part 4 General Mortality Statistics

**Table 4.19**

### Accident Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	Total Deaths		American Indian & Alaska Native All Accidents		Motor Vehicle		U.S. All Races All Accidents		U.S. White All Accidents	
	Actual	Adj	Actual	Adj	Actual	Adj	All Accidents	Motor Vehicle	All Accidents	Motor Vehicle
(1996)	1,055	1,212								
1994-1996 (1995)	1,016	1,180	80.6	92.6	45.9	54.0	30.5	16.3	29.9	16.4
1993-1995 (1994)	1,022	1,173	81.1	93.3	45.4	53.4	30.3	16.1	29.5	16.2
1992-1994 (1993)	1,007	1,168	82.4	94.5	45.5	53.3	30.3	16.0	29.6	16.1
1991-1993 (1992)	977	1,126	83.4	96.1	47.0	55.4	29.4	15.8	28.8	15.9
1990-1992 (1991)	988	1,154	84.3	96.6	47.5	55.8	31.0	17.0	30.3	17.2
1989-1991 (1990)	970	1,101	86.0	98.0	48.4	56.3	32.5	18.5	31.8	18.6
1988-1990 (1989)	969	1,097	89.1	100.8	49.6	57.2	33.8	18.9	32.9	19.1
1987-1989 (1988)	1,012	1,148	93.1	104.8	52.2	59.9	35.0	19.7	34.1	20.0
1986-1988 (1987)	1,000	1,135	95.4		54.3		34.6	19.5	33.9	19.8
1985-1987 (1986)	983		94.8		54.2		35.2	19.4	34.5	19.8
1984-1986 (1985)	912		95.6		53.0		34.7	18.8	34.1	19.1
1983-1985 (1984)	920		98.4		53.2		35.0	19.1	34.6	19.6
1982-1984 (1983)	905		107.8		57.0		35.3	18.5	34.7	19.0
1981-1983 (1982)	999		113.9		62.1		36.6	19.3	36.1	19.8
1980-1982 (1981)	972		124.5		69.4		39.8	21.8	39.3	22.5
1979-1981 (1980)	1,058		132.1		75.2		42.3	22.9	41.5	23.4
1978-1980 (1979)	1,095		142.4		80.4		43.7	23.7	42.9	24.3
1977-1979 (1978)	1,070		145.9		82.4		44.3	23.4	43.3	23.8
1976-1978 (1977)	1,004		149.7		85.0		43.8	22.4	42.5	22.5
1975-1977 (1976)	994		154.1		86.9		43.2	21.5	41.8	21.5
1974-1976 (1975)	999		159.7		87.8		44.8	21.3	43.1	21.2
1973-1975 (1974)	921		175.7		97.3		46.0	21.8	44.3	21.7
1972-1974 (1973)	1,089		188.0		104.8		51.7	26.4	49.5	26.0
(1972)	987									
1954-1956 (1955)	714		184.0		97.6		54.3	24.6	52.2	24.3

Adj—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

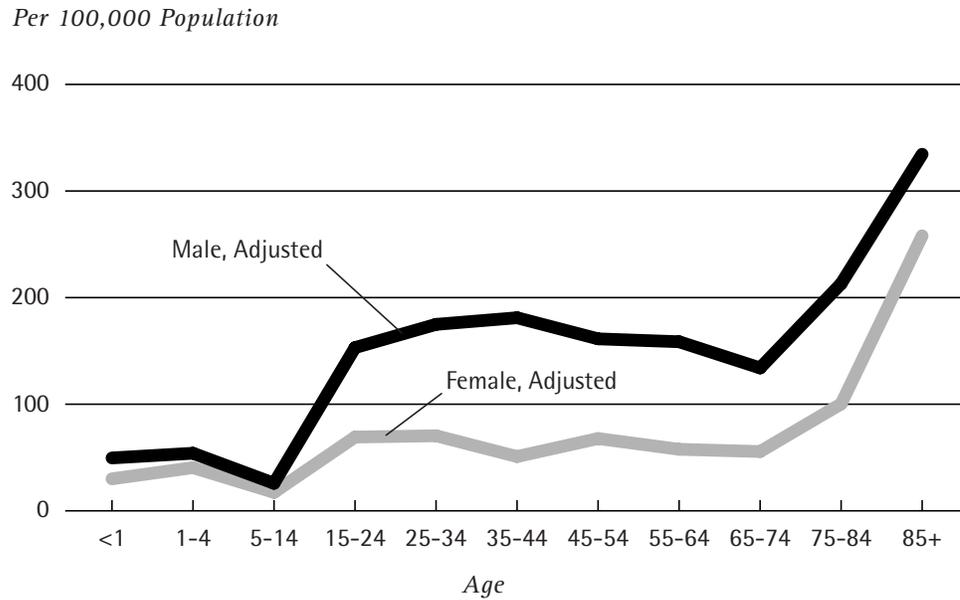
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.20

*Accident Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific death rate for accidents for Indian males (1994-1996) was higher for all age groups in comparison with Indian females. The Indian male rate was 2.4 to 3.6 times the Indian female rate for age groups 25 through 74 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.20**

*Accident Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	36.2	39.9	42.3	49.6	30.0	30.0
1-4 years	40.1	47.4	45.3	54.0	34.7	40.5
5-14 years	20.0	21.6	23.8	25.8	16.1	17.3
15-24 years	90.6	112.0	131.4	153.1	48.2	69.2
25-34 years	103.3	121.5	152.2	174.9	56.0	70.4
35-44 years	99.9	113.9	159.7	181.1	43.8	50.9
45-54 years	99.9	112.5	145.2	161.3	58.4	67.8
55-64 years	97.1	104.7	147.1	158.6	53.5	57.7
65-74 years	87.5	90.2	127.7	134.0	55.6	55.6
75-84 years	134.3	145.7	191.8	213.1	95.6	100.3
85 years +	286.0	286.0	334.5	334.5	258.0	258.0

U.S. All Races			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	20.6	21.5	19.5
1-4 years	14.5	16.9	12.1
5-14 years	9.4	11.8	6.8
15-24 years	38.9	56.8	20.2
25-34 years	33.2	51.0	15.4
35-44 years	33.7	51.4	16.2
45-54 years	30.0	45.3	15.4
55-64 years	32.1	46.0	19.5
65-74 years	45.0	60.1	32.9
75-84 years	98.6	131.0	78.0
85 years +	268.4	368.9	229.2

U.S. White			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	17.4	19.0	15.8
1-4 years	13.3	15.4	11.1
5-14 years	8.8	11.1	6.4
15-24 years	40.6	58.7	21.4
25-34 years	33.0	50.6	15.1
35-44 years	32.2	48.9	15.3
45-54 years	28.1	42.0	14.4
55-64 years	30.4	42.9	18.9
65-74 years	43.5	57.3	32.3
75-84 years	98.0	129.1	78.2
85 years +	274.1	374.0	235.6

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

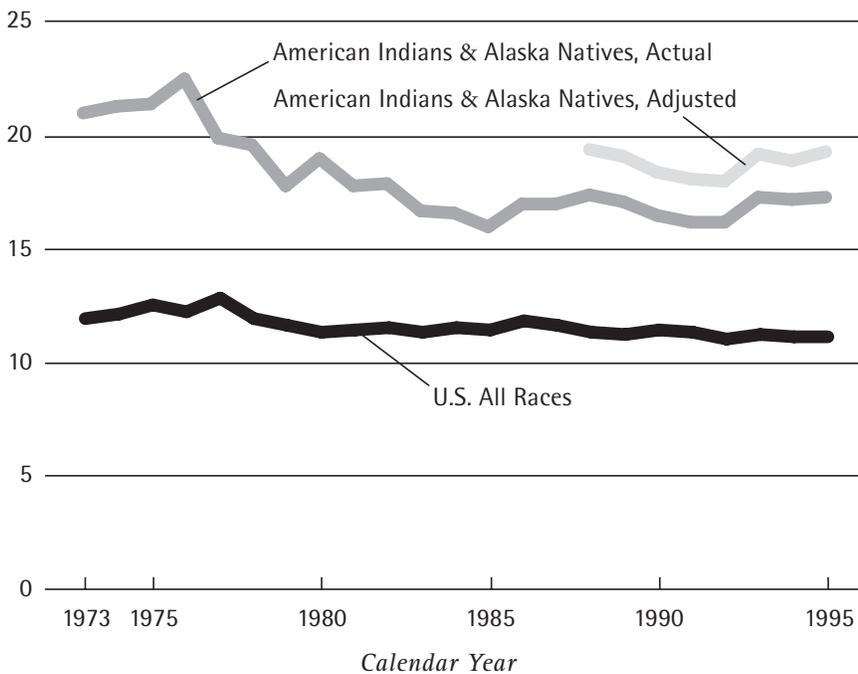
Part 4 General Mortality Statistics

Chart 4.21

Age-Adjusted  
Suicide Death Rates

The age-adjusted suicide death rate for American Indians and Alaska Natives decreased 29 percent from a high (22.5) in 1975-1977 to a low (16.0) in 1984-1986. Since then, it has increased 21 percent to 19.3 in 1994-1996. The 1994-1996 rate is 72 percent higher than the U.S. All Races rate of 11.2 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.

Per 100,000 Population



## Part 4 General Mortality Statistics

**Table 4.21**

### *Suicide Deaths and Death Rates*

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	<i>Actual</i>	<i>Adjusted</i>	<i>Actual</i>	<i>Adjusted</i>			<i>Actual</i>	<i>Adjusted</i>	<i>Actual</i>	<i>Adjusted</i>
(1996)	225	262								
1994-1996 (1995)	205	228	17.3	19.3	11.2	11.9	1.5	1.7	1.5	1.6
1993-1995 (1994)	242	263	17.2	18.9	11.2	11.9	1.5	1.7	1.4	1.6
1992-1994 (1993)	204	226	17.3	19.2	11.3	12.0	1.5	1.7	1.4	1.6
1991-1993 (1992)	193	219	16.2	18.0	11.1	11.8	1.5	1.6	1.4	1.5
1990-1992 (1991)	184	200	16.2	18.1	11.4	12.1	1.4	1.6	1.3	1.5
1989-1991 (1990)	195	218	16.5	18.4	11.5	12.2	1.4	1.6	1.4	1.5
1988-1990 (1989)	192	217	17.1	19.1	11.3	12.0	1.5	1.7	1.4	1.6
1987-1989 (1988)	185	206	17.4	19.4	11.4	12.2	1.5	1.7	1.4	1.6
1986-1988 (1987)	187	206	17.0		11.7	12.5	1.5		1.4	
1985-1987 (1986)	158		17.0		11.9	12.7	1.4		1.3	
1984-1986 (1985)	172		16.0		11.5	12.3	1.4		1.3	
1983-1985 (1984)	148		16.6		11.6	12.4	1.4		1.3	
1982-1984 (1983)	161		16.7		11.4	12.2	1.5		1.4	
1981-1983 (1982)	154		17.9		11.6	12.4	1.5		1.4	
1980-1982 (1981)	157		17.8		11.5	12.2	1.5		1.5	
1979-1981 (1980)	146		19.0		11.4	12.1	1.7		1.6	
1978-1980 (1979)	162		17.8		11.7	12.4	1.5		1.4	
1977-1979 (1978)	117		19.6		12.0	12.7	1.6		1.5	
1976-1978 (1977)	161		19.9		12.9	13.6	1.5		1.5	
1975-1977 (1976)	143		22.5		12.3	12.9	1.8		1.7	
1974-1976 (1975)	139		21.4		12.6	13.3	1.7		1.6	
1973-1975 (1974)	122		21.3		12.2	12.8	1.7		1.7	
1972-1974 (1973)	116		21.0		12.0	12.6	1.8		1.7	
(1972)	113									
1954-1956 (1955)	39		11.9		9.9	10.4	1.2		1.1	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

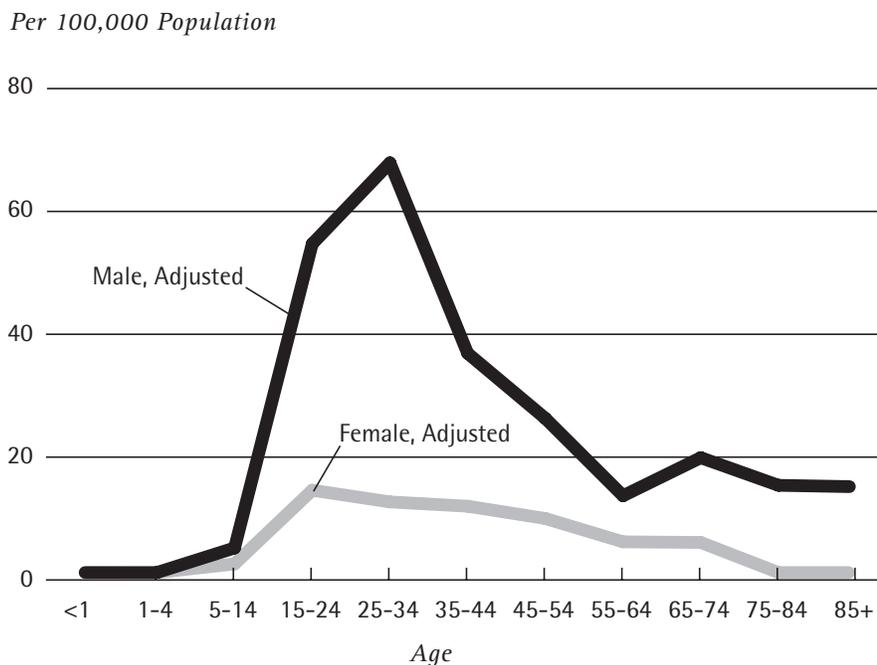
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.22

*Suicide Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific suicide death rate (1994-1996) for Indian males was higher for all age groups in comparison with Indian females. The Indian male rate peaked at 66.7 deaths per 100,000 population for age group 25 to 34 years. These Indian rates have been adjusted for mis-coding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.22**

*Suicide Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

<b>American Indian and Alaska Native</b>						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	—	—	—	—	—	—
5-14 years	2.7	2.7	4.0	4.0	1.4	1.4
15-24 years	29.1	33.9	46.7	53.5	10.6	13.4
25-34 years	33.9	38.5	59.7	66.7	9.3	11.5
35-44 years	21.1	22.8	34.1	35.7	8.9	10.8
45-54 years	15.7	16.6	24.4	25.1	7.7	8.8
55-64 years	8.1	8.5	11.5	12.5	5.0	5.0
65-74 years	10.3	11.0	17.1	18.7	4.9	4.9
75-84 years	5.7	5.7	14.2	14.2	—	—
85 years +	5.1	5.1	13.9	13.9	—	—

<b>U.S. All Races</b>				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—
1-4 years	—	—	—	—
5-14 years	0.9	0.9	0.4	0.4
15-24 years	13.4	13.4	3.7	3.7
25-34 years	15.4	15.4	5.2	5.2
35-44 years	15.3	15.3	6.5	6.5
45-54 years	14.6	14.6	6.7	6.7
55-64 years	13.3	13.3	5.3	5.3
65-74 years	15.8	15.8	5.4	5.4
75-84 years	20.8	20.8	5.5	5.5
85 years +	21.6	21.6	5.5	5.5

<b>U.S. White</b>				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—
1-4 years	—	—	—	—
5-14 years	1.0	1.0	0.4	0.4
15-24 years	14.0	14.0	3.9	3.9
25-34 years	16.3	16.3	5.5	5.5
35-44 years	16.5	16.5	7.2	7.2
45-54 years	15.9	15.9	7.4	7.4
55-64 years	14.4	14.4	5.8	5.8
65-74 years	16.7	16.7	5.7	5.7
75-84 years	22.1	22.1	5.8	5.8
85 years +	23.0	23.0	5.6	5.6

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

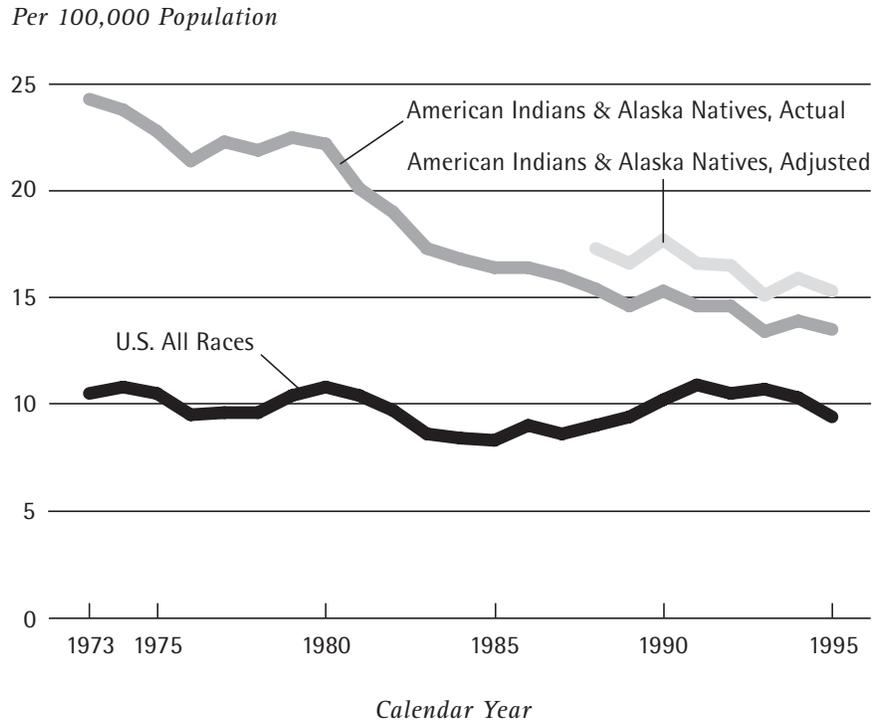
Note: — Represents zero.

Part 4 General Mortality Statistics

Chart 4.23

Age-Adjusted  
Homicide Death Rates

The age-adjusted homicide death rate for American Indians and Alaska Natives has decreased 37 percent since 1972-1974 from 24.3 to 15.3. The 1994-1996 rate (15.3 deaths per 100,000 population) is 63 percent higher than the U.S. All Races rate of 9.4 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.23

Homicide Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:				
	Number		Rate				U.S. All Races		U.S. White		
	Actual	Adjusted	Actual	Adjusted			Actual	Adjusted	Actual	Adjusted	
(1996)	161	178									
1994-1996 (1995)	198	231	13.5	15.3	9.4	5.5	1.4	1.6	2.5	2.8	
1993-1995 (1994)	176	201	13.9	15.9	10.3	5.8	1.3	1.5	2.4	2.7	
1992-1994 (1993)	168	190	13.4	15.1	10.7	6.0	1.3	1.4	2.2	2.5	
1991-1993 (1992)	168	185	14.6	16.5	10.5	6.1	1.4	1.6	2.4	2.7	
1990-1992 (1991)	199	229	14.6	16.6	10.9	6.2	1.3	1.5	2.4	2.7	
1989-1991 (1990)	153	180	15.3	17.7	10.2	5.9	1.5	1.7	2.6	3.0	
1988-1990 (1989)	177	205	14.6	16.6	9.4	5.4	1.6	1.8	2.7	3.1	
1987-1989 (1988)	160	178	15.4	17.3	9.0	5.3	1.7	1.9	2.9	3.3	
1986-1988 (1987)	161	185	16.0		8.6	5.3	1.9		3.0		
1985-1987 (1986)	184		16.4		9.0	5.6	1.8		2.9		
1984-1986 (1985)	151		16.4		8.3	5.4	2.0		3.0		
1983-1985 (1984)	146		16.8		8.4	5.5	2.0		3.1		
1982-1984 (1983)	171		17.3		8.6	5.6	2.0		3.1		
1981-1983 (1982)	145		19.0		9.7	6.3	2.0		3.0		
1980-1982 (1981)	165		20.1		10.4	6.6	1.9		3.0		
1979-1981 (1980)	172		22.2		10.8	6.9	2.1		3.2		
1978-1980 (1979)	164		22.5		10.4	6.5	2.2		3.5		
1977-1979 (1978)	158		21.9		9.6	6.0	2.3		3.7		
1976-1978 (1977)	139		22.3		9.6	5.9	2.3		3.8		
1975-1977 (1976)	144		21.4		9.5	5.5	2.3		3.9		
1974-1976 (1975)	115		22.8		10.5	6.1	2.2		3.7		
1973-1975 (1974)	136		23.8		10.8	6.0	2.2		4.0		
1972-1974 (1973)	139		24.3		10.5	5.7	2.3		4.3		
(1972)	93										
1954-1956 (1955)	77		23.8		4.8	2.4	5.0		9.9		

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

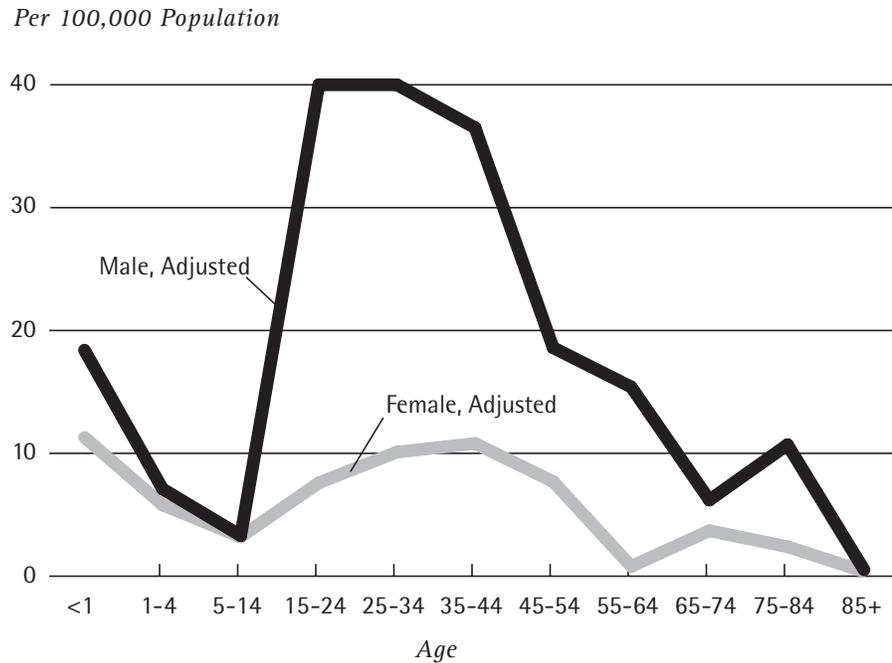
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.24

*Homicide Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific homicide death rate (1994-1996) for Indian males was higher for all age groups except 85 years and older (there were no homicide deaths for either sex for this age group) in comparison with Indian females. The Indian male rate was 40.0 deaths per 100,000 population for age groups 15 through 34. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.24**

*Homicide Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	10.2	14.9	11.0	18.4	9.4	11.3
1-4 years	6.2	6.5	7.1	7.1	5.3	5.8
5-14 years	2.7	3.3	2.7	3.3	2.8	3.2
15-24 years	21.0	24.1	35.2	40.0	6.2	7.6
25-34 years	21.4	24.7	35.0	40.0	8.4	10.1
35-44 years	20.5	23.2	32.9	36.5	8.9	10.8
45-54 years	11.7	12.9	17.3	18.6	6.5	7.7
55-64 years	7.6	7.6	15.4	15.4	0.8	0.8
65-74 years	4.8	4.8	6.2	6.2	3.7	3.7
75-84 years	5.7	5.7	10.7	10.7	2.4	2.4
85 years +	—	—	—	—	—	—

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	8.1	8.9	7.2	8.9
1-4 years	2.9	3.1	2.6	3.1
5-14 years	1.5	1.9	1.0	1.9
15-24 years	20.3	34.0	6.1	34.0
25-34 years	15.1	23.8	6.5	23.8
35-44 years	9.7	14.6	4.9	14.6
45-54 years	6.2	9.7	3.0	9.7
55-64 years	4.5	7.2	2.1	7.2
65-74 years	3.3	4.6	2.2	4.6
75-84 years	3.1	3.7	2.7	3.7
85 years +	3.3	4.3	2.9	4.3

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	6.1	7.1	5.0	7.1
1-4 years	1.9	2.1	1.8	2.1
5-14 years	1.0	1.3	0.8	1.3
15-24 years	10.5	16.6	4.1	16.6
25-34 years	8.7	13.0	4.2	13.0
35-44 years	6.3	9.2	3.4	9.2
45-54 years	4.4	6.4	2.5	6.4
55-64 years	3.3	5.0	1.7	5.0
65-74 years	2.4	3.2	1.9	3.2
75-84 years	2.4	2.5	2.3	2.5
85 years +	2.5	3.6	2.1	3.6

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

Note: — Represents zero.

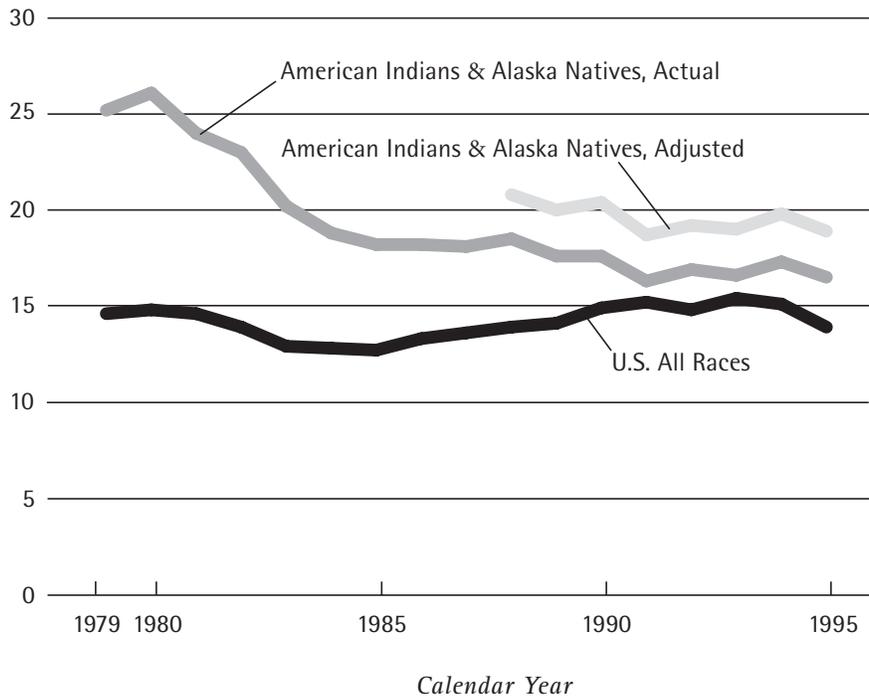
Part 4 General Mortality Statistics

Chart 4.25

Age-Adjusted Firearm Injury Death Rates

The age-adjusted firearm injury death rate for American Indians and Alaska Natives has decreased 25 percent since 1978-1980 from 25.2 to 18.9. The 1994-1996 rate (18.9 deaths per 100,000 population) is 36 percent higher than the U.S. All Races rate of 13.9 for 1995. These Indian rates have been adjusted for mis-coding of Indian race on death certificates.

Per 100,000 Population



**Part 4** *General Mortality Statistics*

**Table 4.25**

*Firearm Injury<sup>1</sup> Deaths and Death Rates*

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1979-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted			Actual	Adjusted	Actual	Adjusted
(1996)	188	214								
1994-1996 (1995)	227	261	16.5	18.9	13.9	11.3	1.2	1.4	1.5	1.7
1993-1995 (1994)	230	264	17.3	19.8	15.1	11.9	1.1	1.3	1.5	1.7
1992-1994 (1993)	204	232	16.6	19.0	15.4	12.5	1.1	1.2	1.3	1.5
1991-1993 (1992)	181	204	16.9	19.2	14.8	12.3	1.1	1.3	1.4	1.6
1990-1992 (1991)	221	253	16.3	18.7	15.2	12.5	1.1	1.2	1.3	1.5
1989-1991 (1990)	172	200	17.6	20.4	14.9	12.6	1.2	1.4	1.4	1.6
1988-1990 (1989)	215	252	17.6	20.0	14.1	12.1	1.2	1.4	1.5	1.7
1987-1989 (1988)	205	227	18.5	20.8	13.9	12.1	1.3	1.5	1.5	1.7
1986-1988 (1987)	182	203	18.1		13.6	12.1	1.3		1.5	
1985-1987 (1986)	186		18.2		13.3	11.7	1.4		1.6	
1984-1986 (1985)	186		18.2		12.7	11.4	1.4		1.6	
1983-1985 (1984)	169		18.8		12.8	11.6	1.5		1.6	
1982-1984 (1983)	185		20.2		12.9	11.5	1.6		1.8	
1981-1983 (1982)	210		23.0		13.9	12.2	1.7		1.9	
1980-1982 (1981)	210		24.0		14.6	12.5	1.6		1.9	
1979-1981 (1980)	195		26.1		14.8	12.4	1.8		2.1	
1978-1980 (1979)	229		25.2		14.6	12.2	1.7		2.1	
(1978)	176									

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

<sup>1</sup> Includes death with ICD-9 codes; Accident caused by firearm missile-E922, Suicide and self-inflicted injury by firearms-E955.0-E955.4, Assault by firearms and legal intervention-E965.0-E965.4, E970, and Injury by firearms, undetermined whether accidentally or purposely inflicted-E985.0-E985.4. Injury by firearms causes exclude explosive and other causes indirectly related to firearms. Includes ICD-8 codes; E922, E955, E965, E970 and E985 (1978 only).

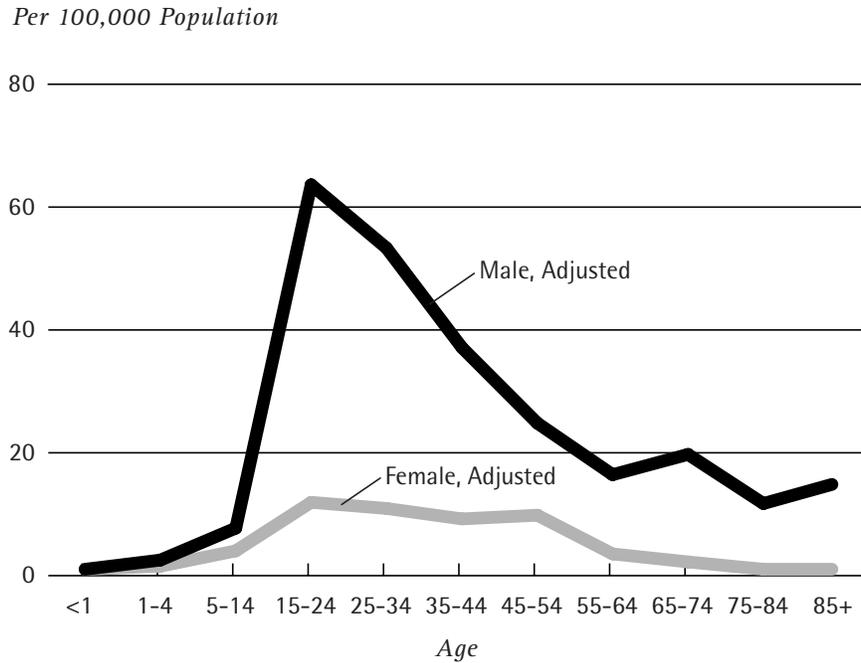
**Source:** U.S. All Races and White Mortality Data: Advance Report on Final Mortality Statistics, 1993, NCHS, DHHS, Report Vol.44, No. 7, Supplement, February 29, 1996, Table 11. Data not published for the U.S. populations prior to 1979.

Part 4 General Mortality Statistics

Chart 4.26

*Firearm Injury Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific firearm injury death rate (1994-1996) for Indian males was higher for all age groups except under 1 year (there were no homicide deaths for either sex for this age group) in comparison with Indian females. The Indian male rate peaked at 62.6 deaths per 100,000 population for the 15 to 24 year age group. This was also the age group in the 1995 U.S. All Races male population that had the highest rate (47.7). However for the 1995 U.S. White population, the highest rate occurred for the male group 85 years and over (50.8). These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4 General Mortality Statistics**

**Table 4.26**

*Firearm Injury<sup>1</sup> Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	1.0	1.0	1.5	1.5	0.5	0.5
5-14 years	4.3	4.9	6.0	6.7	2.5	3.0
15-24 years	31.9	37.3	54.5	62.6	8.4	10.9
25-34 years	26.6	30.6	45.8	52.3	8.2	9.9
35-44 years	19.9	22.6	32.5	36.1	8.2	8.2
45-54 years	14.1	16.0	21.8	23.8	7.1	8.8
55-64 years	8.1	8.5	14.4	15.4	2.5	2.5
65-74 years	8.3	9.0	17.1	18.7	1.2	1.2
75-84 years	4.3	4.3	10.7	10.7	—	—
85 years +	5.1	5.1	13.9	13.9	—	—

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
Under 1 year	0.2	0.2	0.3	0.3
1-4 years	0.6	0.6	0.5	0.5
5-14 years	2.0	2.0	0.9	0.9
15-24 years	27.3	27.3	6.0	6.0
25-34 years	20.2	20.2	5.9	5.9
35-44 years	14.4	14.4	5.3	5.3
45-54 years	12.2	12.2	4.3	4.3
55-64 years	11.4	11.4	3.5	3.5
65-74 years	12.9	12.9	3.0	3.0
75-84 years	16.4	16.4	2.8	2.8
85 years +	14.6	14.6	1.8	1.8

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
Under 1 year	1.0	1.0	1.0	1.0
1-4 years	0.4	0.4	0.4	0.4
5-14 years	1.7	1.7	0.8	0.8
15-24 years	18.4	18.4	4.6	4.6
25-34 years	15.7	15.7	5.1	5.1
35-44 years	13.1	13.1	4.9	4.9
45-54 years	11.9	11.9	4.4	4.4
55-64 years	11.4	11.4	3.6	3.6
65-74 years	13.4	13.4	3.1	3.1
75-84 years	17.3	17.3	3.0	3.0
85 years +	15.4	15.4	1.8	1.8

<sup>1</sup> Includes deaths with ICD-9 codes; Accident caused by firearm missile-E922, Suicide and self-inflicted injury by firearms-E955.0-E955.4, Assault by firearms and legal intervention-E965.0-E965.4, E970, and injury by firearms, undetermined whether accidentally or purposely inflicted-E985.0-E985.4. Injury by firearms causes exclude explosive and other causes indirectly related to firearms.

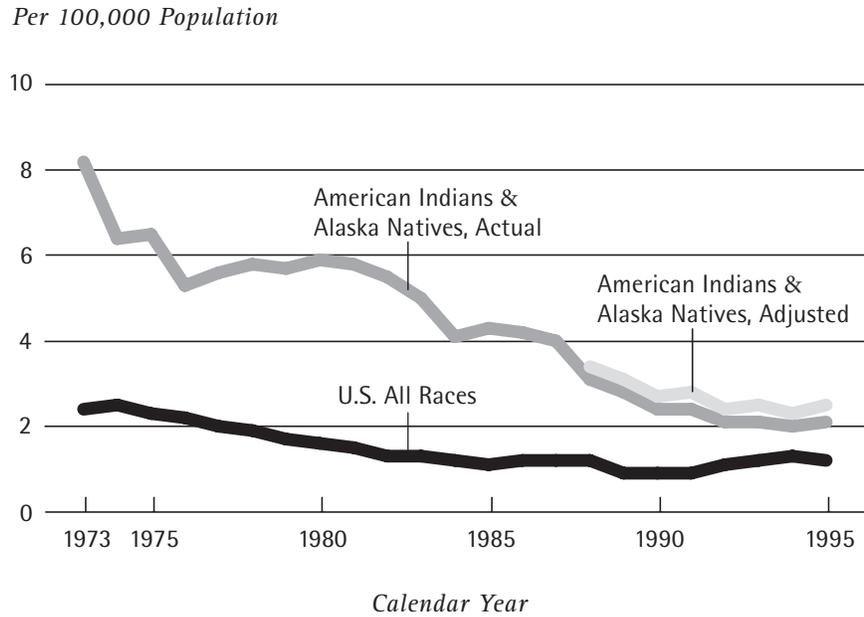
<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates. **Note:** — Represents zero.

Part 4 General Mortality Statistics

Chart 4.27

Age-Adjusted  
Other Injury Death Rates

The age-adjusted death rate due to other injuries (undetermined injury and war injury) has decreased 71 percent since 1972-1974 from 8.3 to 2.4. The 1994-1996 rate (2.4 deaths per 100,000 population) is twice the U.S. All Races rate of 1.2 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



## Part 4 General Mortality Statistics

**Table 4.27**

### *Other Injury<sup>1,2</sup> Deaths and Death Rates*

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted		
(1996)	29	34								
1994-1996 (1995)	30	31	2.2	2.4	1.2	1.1	1.8	2.0	2.0	2.2
1993-1995 (1994)	24	28	2.1	2.2	1.3	1.2	1.6	1.7	1.8	1.8
1992-1994 (1993)	24	25	2.2	2.4	1.2	1.1	1.8	2.0	2.0	2.2
1991-1993 (1992)	31	34	2.2	2.3	1.1	1.0	2.0	2.1	2.2	2.3
1990-1992 (1991)	26	27	2.5	2.7	0.9	0.8	2.8	3.0	3.1	3.4
1989-1991 (1990)	31	33	2.5	2.6	0.9	0.8	2.8	2.9	3.1	3.3
1988-1990 (1989)	28	29	2.9	3.0	0.9	0.8	3.2	3.3	3.6	3.8
1987-1989 (1988)	34	35	3.2	3.3	1.2	1.0	2.7	2.8	3.2	3.3
1986-1988 (1987)	41	42	4.1		1.2	1.0	3.4		4.1	
1985-1987 (1986)	50		4.3		1.2	1.1	3.6		3.9	
1984-1986 (1985)	39		4.4		1.1	1.0	4.0		4.4	
1983-1985 (1984)	39		4.2		1.2	1.1	3.5		3.8	
1982-1984 (1983)	40		5.1		1.3	1.1	3.9		4.6	
1981-1983 (1982)	52		5.6		1.3	1.2	4.3		4.7	
1980-1982 (1981)	46		5.9		1.5	1.3	3.9		4.5	
1979-1981 (1980)	39		6.0		1.6	1.4	3.8		4.3	
1978-1980 (1979)	49		5.8		1.7	1.5	2.4		2.7	
1977-1979 (1978)	37		5.9		1.9	1.6	3.1		3.7	
1976-1978 (1977)	38		5.7		2.0	1.6	2.9		3.6	
1975-1977 (1976)	39		5.4		2.2	1.8	2.5		2.2	
1974-1976 (1975)	29		6.6		2.3	1.9	2.9		3.5	
1973-1975 (1974)	50		6.5		2.5	2.1	2.6		3.1	
1972-1974 (1973)	35 <sup>3</sup>		8.3		2.4	2.0	3.5		4.2	
(1972)	46									
1954-1956 (1955)	NA		NA		NA	NA	NA		NA	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

<sup>1</sup> Includes deaths with ICD-9 codes E980-E989; Injury undetermined whether accidentally or purposely inflicted.

<sup>2</sup> Includes deaths with ICD-9 codes E990-E999; Injury resulting from operations of war.

<sup>3</sup> In 1973 there was one American Indian injury death resulting from operations of war.

For each of the other years shown above there were no American Indian injury deaths due to this cause.

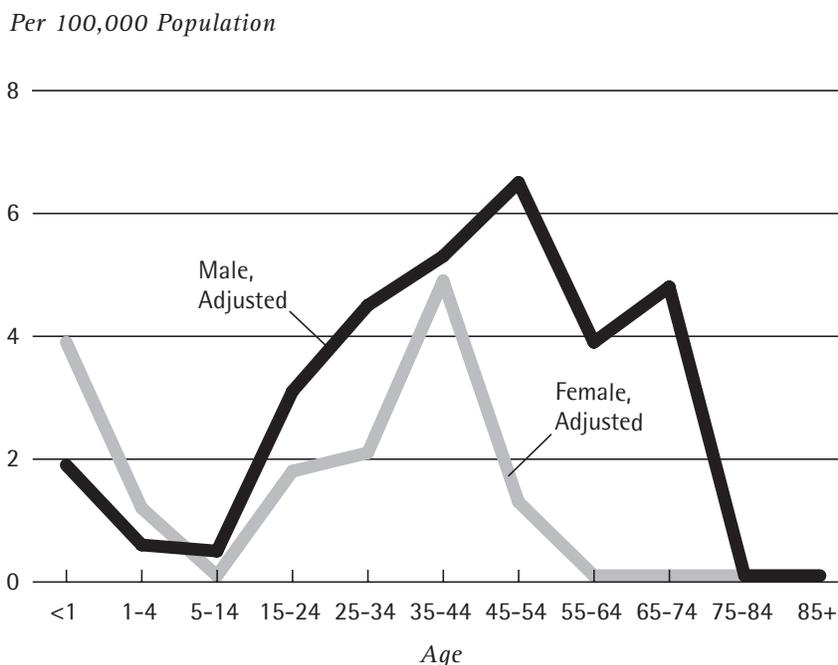
**Note:** NA denotes data not available. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.28

*Other Injury Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific death rate due to other injuries (1994-1996) for Indian males was higher for all age groups from 5 through 74 years in comparison with Indian females (for 75 years and older the rates were both 0.0). Female age-specific death rates due to other injuries (1994-1996) were higher for age groups under 1 year through 4 years in comparison to Indian males. The highest age and sex-specific rates occurred for males in age groups 25 through 54 years, 4.4 to 6.4 deaths per 100,000 population. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.28**

*Other Injury Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	3.7 <sup>2</sup>	2.8 <sup>2</sup>	1.8	1.8	5.6 <sup>2</sup>	3.8 <sup>2</sup>
1-4 years	0.5	0.8	0.5	0.5	0.5	1.1
5-14 years	0.2	0.2	0.4	0.4	—	—
15-24 years	1.8	2.3	2.7	3.0	0.8	1.7
25-34 years	2.7	3.2	3.8	4.4	1.7	2.0
35-44 years	4.8	5.0	5.2	5.2	4.5	4.8
45-54 years	3.7	3.7	6.4	6.4	1.2	1.2
55-64 years	1.8	1.8	3.8	3.8	—	—
65-74 years	2.1	2.1	4.7	4.7	—	—
75-84 years	—	—	—	—	—	—
85 years +	—	—	—	—	—	—

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	1.5	1.4	1.5	1.5
1-4 years	0.3	0.4	0.2	0.2
5-14 years	0.1	0.2	0.0	0.0
15-24 years	1.0	1.7	0.3	0.3
25-34 years	1.9	2.8	1.0	1.0
35-44 years	2.7	4.2	1.1	1.1
45-54 years	1.5	2.2	0.8	0.8
55-64 years	0.7	0.9	0.5	0.5
65-74 years	0.5	0.8	0.4	0.4
75-84 years	0.8	1.3	0.4	0.4
85 years +	1.6	3.0	1.0	1.0

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	1.1	1.0	1.2	1.2
1-4 years	0.2	0.2	0.2	0.2
5-14 years	0.1	0.2	0.0	0.0
15-24 years	0.9	1.5	0.3	0.3
25-34 years	1.8	2.7	0.9	0.9
35-44 years	2.4	3.8	1.0	1.0
45-54 years	1.3	1.8	0.7	0.7
55-64 years	0.7	0.8	0.5	0.5
65-74 years	0.5	0.6	0.4	0.4
75-84 years	0.8	1.3	0.4	0.4
85 years +	1.4	2.5	1.0	1.0

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

<sup>2</sup> The actual file contained 3 female infant deaths, while the adjusted file (linked birth/infant death file) contained 2 female infant deaths for this cause of death group.

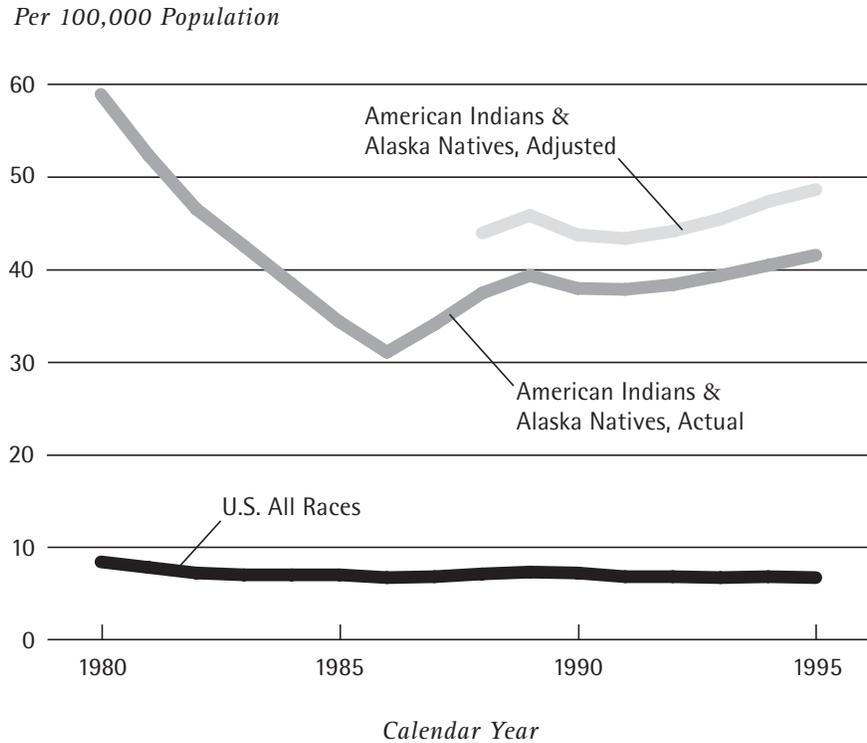
**Note:** — Represents zero. 0.0 rounds to zero.

Part 4 General Mortality Statistics

Chart 4.29

Age-Adjusted  
Alcoholism Death Rates

The age-adjusted alcoholism death rate for American Indians and Alaska Natives decreased 47 percent (from 59.0 to 31.1) between 1979-1981 and 1985-1987. Since then, it has increased 57 percent. The 1994-1996 rate (48.7 deaths per 100,000 population) is over 7 times the U.S. All Races rate of 6.7 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.29

Alcoholism Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1979-1995  
Age-Adjusted Rate per 100,000 Population

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted			Actual	Adjusted	Actual	Adjusted
(1996)	456	527								
1994-1996 (1995)	460	543	41.6	48.7	6.7	6.2	6.2	7.3	6.7	7.9
1993-1995 (1994)	427	494	40.5	47.4	6.8	6.2	6.0	7.0	6.5	7.6
1992-1994 (1993)	395	458	39.4	45.5	6.7	6.1	5.9	6.8	6.5	7.5
1991-1993 (1992)	402	458	38.4	44.2	6.8	6.1	5.6	6.5	6.3	7.2
1990-1992 (1991)	367	417	37.9	43.4	6.8	6.0	5.6	6.4	6.3	7.2
1989-1991 (1990)	350	403	38.0	43.8	7.2	6.2	5.3	6.1	6.1	7.1
1988-1990 (1989)	376	436	39.4	45.9	7.3	6.2	5.4	6.3	6.4	7.4
1987-1989 (1988)	375	441	37.5	44.0	7.1	5.9	5.3	6.2	6.4	7.5
1986-1988 (1987)	264	310	34.1		6.8	5.8	5.0		5.9	
1985-1987 (1986)	264		31.1		6.7	5.7	4.6		5.5	
1984-1986 (1985)	274		34.4		7.0	5.8	4.9		5.9	
1983-1985 (1984)	302		38.5		7.0	5.9	5.5		6.5	
1982-1984 (1983)	295		42.6		7.0	6.0	6.1		7.1	
1981-1983 (1982)	293		46.6		7.2	6.2	6.5		7.5	
1980-1982 (1981)	344		52.4		7.8	6.6	6.7		7.9	
1979-1981 (1980)	369		59.0		8.4	6.9	7.0		8.6	
(1979)	377									

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

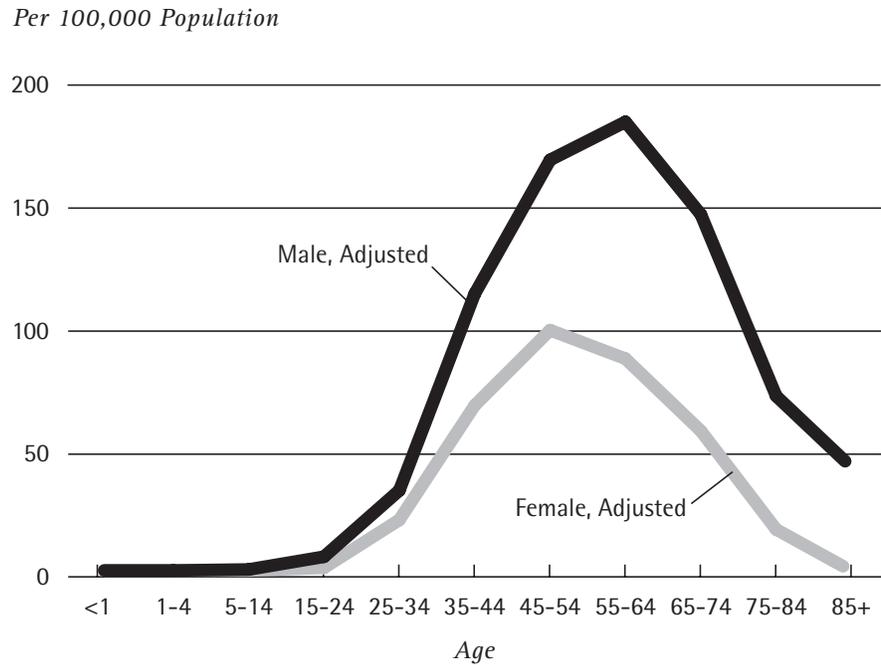
**Note:** For all years presented above, the causes of death that define alcoholism deaths have been expanded to include alcoholic polyneuropathy-357.5 and the entire code group for accidental poisoning by alcohol-E860, as defined by the National Center for Health Statistics, DHHS, for all years in which ICD-9 codes are employed (1979 to the present). For a complete description of the causes of death that define deaths due to alcoholism, refer to the Glossary of ICD-9 Codes. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths for the Indian population and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.30

*Alcoholism Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

Drinking has taken a greater toll on Indian males compared to Indian females as evidenced by alcoholism death rates. The age-specific alcoholism death rate (1994-1996) for Indian males was higher for all age groups, with a non-zero rate, in comparison with Indian females. However, the Indian female rate is much higher than the rate for females in the U.S. All Races population. The U.S. female rate never reached 10.0 for an age group in 1995, whereas the Indian female rate ranged from 20.6 to 97.8 for age groups 25 through 74 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.30**

*Alcoholism Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	—	—	—	—	—	—
5-14 years	0.2	0.2	0.4	0.4	—	—
15-24 years	3.2	3.4	5.4	5.6	0.8	1.1
25-34 years	24.0	26.5	30.9	32.6	17.5	20.6
35-44 years	76.7	89.1	99.9	112.6	54.9	67.2
45-54 years	109.8	131.0	143.9	167.1	78.4	97.8
55-64 years	109.6	131.1	151.9	182.6	72.8	86.2
65-74 years	84.0	95.7	126.2	144.9	50.6	56.8
75-84 years	34.3	38.6	60.4	71.0	16.7	16.7
85 years +	15.3	15.3	41.8	41.8	—	—

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	0.1	0.1	0.1	0.1
1-4 years	—	—	—	—
5-14 years	0.0	0.0	0.0	0.0
15-24 years	0.3	0.5	0.1	0.1
25-34 years	2.1	3.0	1.1	1.1
35-44 years	9.8	14.8	4.9	4.9
45-54 years	17.5	27.9	7.5	7.5
55-64 years	22.3	36.4	9.5	9.5
65-74 years	19.0	32.6	8.1	8.1
75-84 years	11.1	20.8	4.9	4.9
85 years +	5.3	12.7	2.4	2.4

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	0.1	0.1	0.2	0.2
1-4 years	—	—	—	—
5-14 years	0.0	0.0	—	—
15-24 years	0.3	0.4	0.1	0.1
25-34 years	1.9	2.8	1.0	1.0
35-44 years	8.9	13.6	4.1	4.1
45-54 years	15.7	25.0	6.6	6.6
55-64 years	20.4	33.1	8.6	8.6
65-74 years	17.9	30.6	7.6	7.6
75-84 years	10.9	20.5	4.8	4.8
85 years +	5.0	12.0	2.3	2.3

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

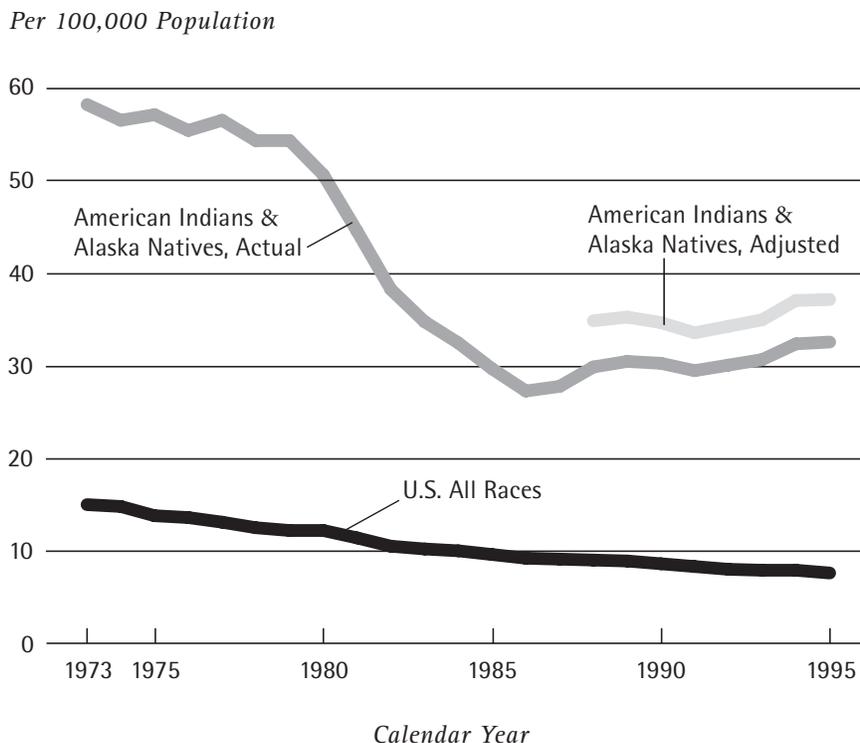
**Note:** — Represents zero. 0.0 rounds to zero.

Part 4 General Mortality Statistics

Chart 4.31

Age-Adjusted  
Chronic Liver Disease  
and Cirrhosis  
Death Rates

The age-adjusted chronic liver disease and cirrhosis death rate for American Indians and Alaska Natives has decreased 36 percent (from 58.3 to 37.2) since 1972-1974. The 1994-1996 rate (37.2 deaths per 100,000 population) is 4.9 times the U.S. All Races rate of 7.6 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.31**

*Chronic Liver Disease and Cirrhosis Deaths and Death Rates*

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:				
	Number		Rate				U.S. All Races		U.S. White		
	Actual	Adjusted	Actual	Adjusted			Actual	Adjusted	Actual	Adjusted	
(1996)	339	386									
1994-1996 (1995)	372	420	32.6	37.2	7.6	7.4	4.3	4.9	4.4	5.0	
1993-1995 (1994)	329	377	32.4	37.1	7.9	7.5	4.1	4.7	4.3	4.9	
1992-1994 (1993)	312	358	30.7	35.0	7.9	7.6	3.9	4.4	4.0	4.6	
1991-1993 (1992)	299	336	30.1	34.3	8.0	7.7	3.8	4.3	3.9	4.5	
1990-1992 (1991)	288	326	29.5	33.6	8.3	7.8	3.6	4.0	3.8	4.3	
1989-1991 (1990)	267	307	30.3	34.7	8.6	8.0	3.5	4.0	3.8	4.3	
1988-1990 (1989)	299	344	30.5	35.3	8.9	8.3	3.4	4.0	3.7	4.3	
1987-1989 (1988)	267	314	29.9	34.9	9.0	8.4	3.3	3.9	3.6	4.2	
1986-1988 (1987)	224	264	27.8		9.1	8.4	3.1		3.3		
1985-1987 (1986)	224		27.3		9.2	8.6	3.0		3.2		
1984-1986 (1985)	237		29.7		9.6	8.9	3.1		3.3		
1983-1985 (1984)	243		32.5		10.0	9.3	3.3		3.5		
1982-1984 (1983)	236		34.8		10.2	9.5	3.4		3.7		
1981-1983 (1982)	230		38.3		10.5	9.8	3.6		3.9		
1980-1982 (1981)	284		44.6		11.4	10.5	3.9		4.2		
1979-1981 (1980)	324		50.7		12.2	11.0	4.2		4.6		
1978-1980 (1979)	305		54.4		12.2	11.1	4.5		4.9		
1977-1979 (1978)	308		54.4		12.5	11.3	4.4		4.8		
1976-1978 (1977)	281		56.6		13.1	11.8	4.3		4.8		
1975-1977 (1976)	296		55.5		13.6	12.3	4.1		4.5		
1974-1976 (1975)	249		57.2		13.8	12.6	4.1		4.5		
1973-1975 (1974)	257		56.6		14.8	13.4	3.8		4.2		
1972-1974 (1973)	238		58.3		15.0	13.7	3.9		4.3		
(1972)	222										
1954-1956 (1955)			26.9		9.4	9.4					

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

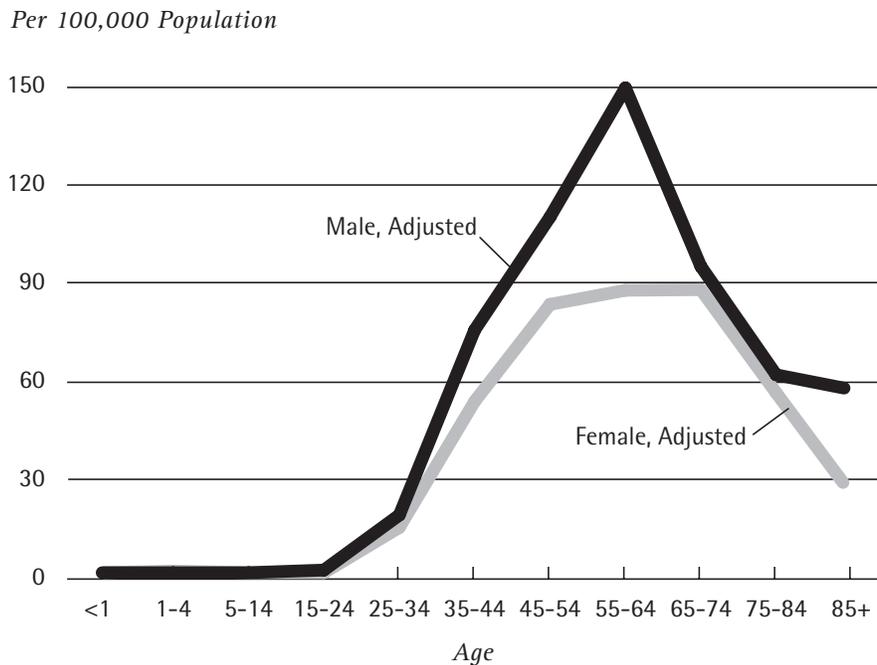
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.32

*Chronic Liver Disease and Cirrhosis Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

Other than for age groups under 15 years, the age-specific chronic liver disease and cirrhosis death rate (1994-1996) for Indian males was higher for all age groups in comparison with Indian females. The Indian male rate exceeded 108.0 deaths per 100,000 population for age groups 45 through 64 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.32**

*Chronic Liver Disease and Cirrhosis Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	0.3	0.3	—	—	0.5	0.5
5-14 years	—	—	—	—	—	—
15-24 years	0.4	0.4	0.8	0.8	—	—
25-34 years	14.4	15.7	16.5	17.6	12.4	13.8
35-44 years	54.4	62.9	65.8	74.1	43.8	52.3
45-54 years	81.5	94.7	96.4	108.6	67.8	81.9
55-64 years	100.6	115.0	100.6	148.0	77.0	86.2
65-74 years	81.3	89.5	81.3	93.5	77.8	86.4
75-84 years	52.9	57.1	52.9	60.4	52.6	54.9
85 years +	35.8	35.8	35.8	55.8	24.2	24.2

U.S. All Races			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	0.6	0.6	0.5
1-4 years	0.0	0.0	0.1
5-14 years	0.0	0.0	0.0
15-24 years	0.1	0.1	0.0
25-34 years	1.5	1.5	0.9
35-44 years	8.7	8.7	4.7
45-54 years	16.9	16.9	8.6
55-64 years	25.4	25.4	15.2
65-74 years	31.5	31.5	21.5
75-84 years	31.4	31.4	25.4
85 years +	22.9	22.9	18.3

U.S. White			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	0.5	0.5	0.3
1-4 years	0.0	0.0	0.0
5-14 years	0.0	0.0	0.0
15-24 years	0.1	0.1	0.0
25-34 years	1.4	1.4	0.8
35-44 years	8.2	8.2	4.2
45-54 years	16.0	16.0	7.7
55-64 years	24.5	24.5	14.4
65-74 years	32.1	32.1	21.9
75-84 years	32.2	32.2	25.8
85 years +	23.4	23.4	18.7

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

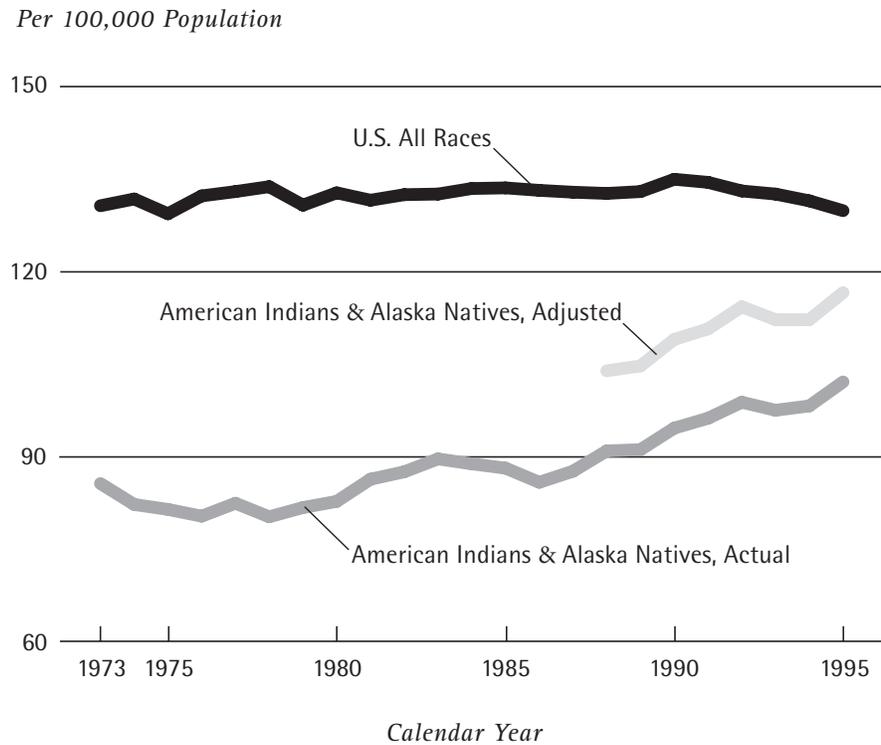
**Note:** — Represents zero. 0.0 rounds to zero.

Part 4 General Mortality Statistics

Chart 4.33

Age-Adjusted Malignant Neoplasm Death Rates

The age-adjusted malignant neoplasm death rate for American Indians and Alaska Natives hit a low in 1977-1979 of 80.2 deaths per 100,000 population, but has increased 45 percent since then to 116.6 in 1994-1996. The Indian rate is lower than the U.S. All Races rate, but the gap between the two rates has been decreasing. The 1994-1996 Indian rate (116.6 deaths per 100,000 population) is only 10 percent less than the All Races rate of 129.9 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.33

Malignant Neoplasm Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted		
(1996)	1,226	1,400								
1994-1996 (1995)	1,141	1,278	102.1	116.6	129.9	127.0	0.8	0.9	0.8	0.9
1993-1995 (1994)	1,046	1,201	98.2	112.2	131.5	128.6	0.7	0.9	0.8	0.9
1992-1994 (1993)	1,025	1,169	97.5	112.2	132.6	129.4	0.7	0.8	0.8	0.9
1991-1993 (1992)	1,026	1,174	98.8	114.3	133.1	129.9	0.7	0.9	0.8	0.9
1990-1992 (1991)	1,021	1,175	96.2	110.7	134.5	131.3	0.7	0.8	0.7	0.8
1989-1991 (1990)	859	969	94.6	109.0	135.0	131.5	0.7	0.8	0.7	0.8
1988-1990 (1989)	913	1,049	91.1	104.7	133.0	130.2	0.7	0.8	0.7	0.8
1987-1989 (1988)	831	954	90.9	103.9	132.7	130.0	0.7	0.8	0.7	0.8
1986-1988 (1987)	768	863	87.6		132.9	130.1	0.7		0.7	
1985-1987 (1986)	756		85.8		133.2	130.4	0.6		0.7	
1984-1986 (1985)	714		88.1		133.6	130.7	0.7		0.7	
1983-1985 (1984)	712		88.8		133.5	130.2	0.7		0.7	
1982-1984 (1983)	662		89.6		132.6	129.4	0.7		0.7	
1981-1983 (1982)	617		87.5		132.5	129.4	0.7		0.7	
1980-1982 (1981)	578		86.3		131.6	128.5	0.7		0.7	
1979-1981 (1980)	567		82.7		132.8	129.6	0.6		0.6	
1978-1980 (1979)	480		81.7		130.8	130.2	0.6		0.6	
1977-1979 (1978)	503		80.2		133.8	130.8	0.6		0.6	
1976-1978 (1977)	456		82.4		133.0	130.0	0.6		0.6	
1975-1977 (1976)	441		80.3		132.3	129.5	0.6		0.6	
1974-1976 (1975)	395		81.4		129.4	128.1	0.6		0.6	
1973-1975 (1974)	403		82.2		131.8	129.0	0.6		0.6	
1972-1974 (1973)	385		85.6		130.7	127.7	0.7		0.7	
(1972)	354									
1954-1956 (1955)	296		95.0		125.8	125.8	0.8		0.8	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

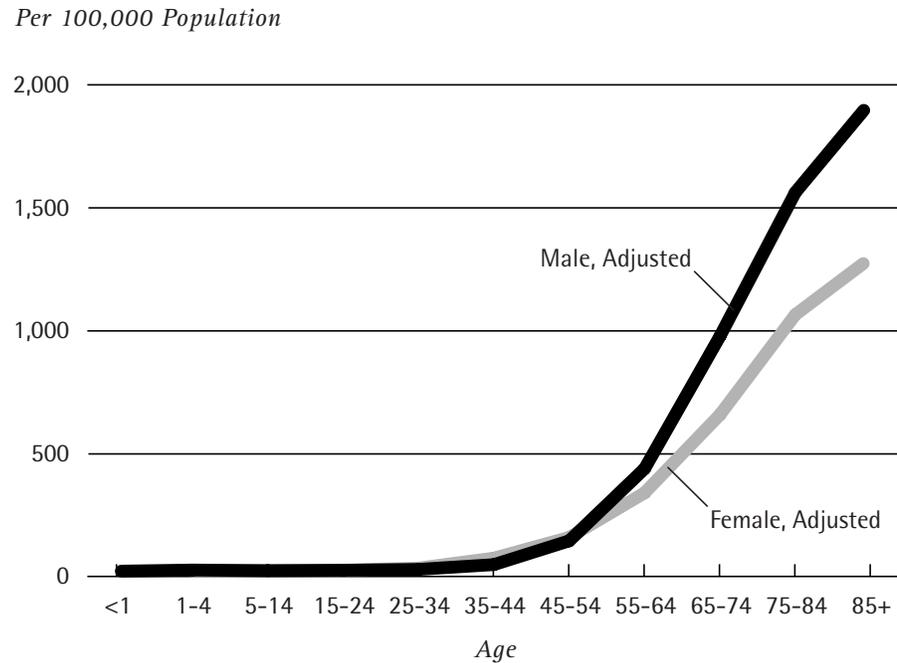
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.34

*Malignant Neoplasm Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific malignant neoplasm death rate (1994-1996) for Indian males was fifty percent greater than that for Indian females for age groups over 64 years. However, for the age group 35 to 44 years, the female rate was twice the male rate. The rate for Indian females increased with age, and for Indian males the rate increased beginning with age 5. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.34**

*Malignant Neoplasm Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	1.9	0.9	3.7	1.8	—	—
1-4 years	2.6	2.8	4.1	4.6	1.1	1.1
5-14 years	1.9	2.5	1.8	2.0	2.1	3.0
15-24 years	3.4	3.8	3.5	3.8	3.4	3.9
25-34 years	8.5	10.1	6.8	7.3	10.1	12.7
35-44 years	34.3	40.3	25.4	26.6	42.7	53.1
45-54 years	117.7	130.7	112.4	123.4	122.6	137.3
55-64 years	313.6	364.5	360.5	417.2	272.7	318.7
65-74 years	675.7	778.3	825.7	956.5	556.9	637.1
75-84 years	1,096.9	1,244.0	1,353.2	1,541.5	924.5	1,043.9
85 years +	1,465.9	1,506.7	1,812.1	1,909.7	1,265.6	1,273.7

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	1.8	—	1.8	—
1-4 years	3.1	—	2.6	—
5-14 years	2.7	—	2.4	—
15-24 years	4.6	—	3.6	—
25-34 years	12.0	—	12.3	—
35-44 years	40.4	—	44.1	—
45-54 years	142.3	—	140.9	—
55-64 years	416.4	—	357.9	—
65-74 years	868.7	—	691.0	—
75-84 years	1,365.3	—	1,061.8	—
85 years +	1,824.2	—	1,429.4	—

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	1.8	—	1.7	—
1-4 years	3.1	—	2.4	—
5-14 years	2.7	—	2.3	—
15-24 years	4.6	—	3.5	—
25-34 years	11.4	—	11.5	—
35-44 years	38.2	—	42.1	—
45-54 years	135.4	—	136.3	—
55-64 years	404.7	—	353.0	—
65-74 years	858.1	—	689.8	—
75-84 years	1,353.3	—	1,060.5	—
85 years +	1,811.5	—	1,428.4	—

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

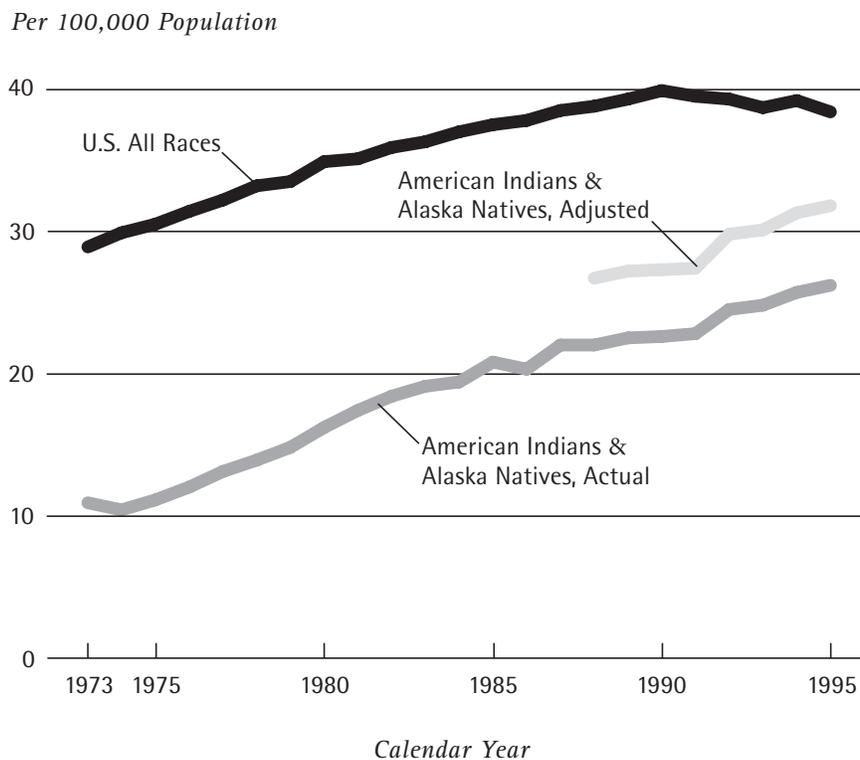
**Note:** — Represents zero.

Part 4 General Mortality Statistics

Chart 4.35

Age-Adjusted Lung Cancer Death Rates

The age-adjusted lung cancer (this category has been expanded to also include trachea and bronchus) death rate for American Indians and Alaska Natives hit a low in 1973-1975 of 10.4 deaths per 100,000 population, but has increased 206 percent since then to 31.8 in 1994-1996. The Indian rate is lower than the U.S. All Races rate, but the gap between the two rates has been decreasing. The 1994-1996 Indian rate (31.8 deaths per 100,000 population) is only 17 percent less than the All Races rate of 38.4 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.35**

*Lung Cancer<sup>1</sup> Deaths and Death Rates*

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races	U.S. White	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted	Rate	Rate	Actual	Adjusted	Actual	Adjusted
(1996)	290	351								
1994-1996 (1995)	286	342	26.2	31.8	38.4	38.0	0.7	0.8	0.7	0.8
1993-1995 (1994)	264	321	25.7	31.3	38.7	38.4	0.7	0.8	0.7	0.8
1992-1994 (1993)	260	316	24.8	30.1	39.2	38.8	0.6	0.8	0.6	0.8
1991-1993 (1992)	233	278	24.5	29.8	39.3	38.8	0.6	0.8	0.6	0.8
1990-1992 (1991)	235	284	22.8	27.4	39.5	39.0	0.6	0.7	0.6	0.7
1989-1991 (1990)	188	220	22.6	27.3	39.9	39.3	0.6	0.7	0.6	0.7
1988-1990 (1989)	207	251	22.5	27.2	39.3	38.6	0.6	0.7	0.6	0.7
1987-1989 (1988)	209	253	22.0	26.7	38.8	38.3	0.6	0.7	0.6	0.7
1986-1988 (1987)	152	181	22.0		38.5	37.8	0.6		0.6	
1985-1987 (1986)	194		20.3		37.8	37.2	0.5		0.5	
1984-1986 (1985)	155		20.8		37.5	36.8	0.6		0.6	
1983-1985 (1984)	146		19.4		37.0	36.4	0.5		0.5	
1982-1984 (1983)	134		19.1		36.3	35.7	0.5		0.5	
1981-1983 (1982)	124		18.4		35.9	35.2	0.5		0.5	
1980-1982 (1981)	113		17.4		35.1	34.4	0.5		0.5	
1979-1981 (1980)	103		16.2		34.9	34.2	0.5		0.5	
1978-1980 (1979)	89		14.8		33.5	32.9	0.4		0.4	
1977-1979 (1978)	79		13.9		33.2	32.6	0.4		0.4	
1976-1978 (1977)	73		13.1		32.2	31.5	0.4		0.4	
1975-1977 (1976)	63		12.0		31.4	30.9	0.4		0.4	
1974-1976 (1975)	47		11.1		30.5	29.9	0.4		0.4	
1973-1975 (1974)	49		10.4		29.9	29.3	0.3		0.4	
1972-1974 (1973)	44		10.9		28.9	28.4	0.4		0.4	
(1972)	43									
1954-1956 (1955)	NA		NA		NA	NA	NA		NA	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

<sup>1</sup> Lung cancer deaths includes deaths due to cancers of the trachea, bronchus and lung, ICD-9 codes and ICD-8 codes 162.0 to 162.9.

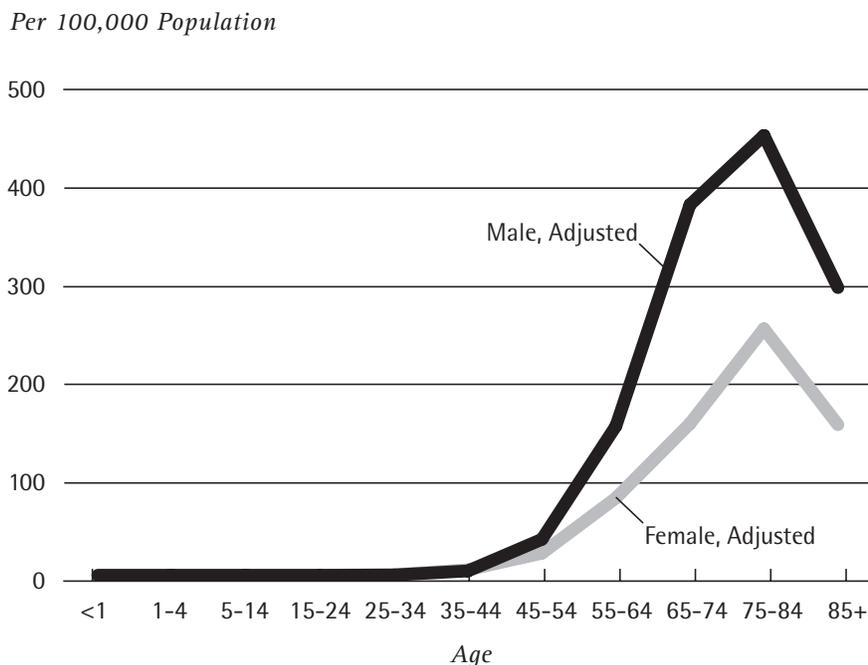
**Note:** NA denotes data not available. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.36

*Lung Cancer Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific lung cancer (this category has been expanded to also include trachea and bronchus) death rate (1994-1996) for Indian males and females was fairly similar for age groups 1 through 44 years. The rate for Indian females increased with age, and for Indian males the rate increased beginning with age 25. The rate decreased at age 85 for both Indian males and females. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4 General Mortality Statistics**

**Table 4.36**

*Lung Cancer<sup>1</sup> Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	—	—	—	—	—	—
5-14 years	—	—	—	—	—	—
15-24 years	—	—	—	—	—	—
25-34 years	0.3	0.4	0.3	0.3	0.3	0.6
35-44 years	4.0	5.0	4.0	4.4	4.1	5.6
45-54 years	25.2	29.2	32.8	36.6	18.3	22.4
55-64 years	90.8	112.7	124.0	151.9	61.9	78.6
65-74 years	207.3	252.8	308.5	377.0	127.2	154.3
75-84 years	274.2	329.9	362.3	447.5	215.0	250.8
85 years +	199.2	204.3	278.8	292.7	153.2	153.2

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
Under 1 year	0.1	—	—	—
1-4 years	0.0	—	0.0	—
5-14 years	0.0	—	0.0	—
15-24 years	0.1	—	0.1	—
25-34 years	0.7	—	0.6	—
35-44 years	6.0	—	5.0	—
45-54 years	38.0	—	29.4	—
55-64 years	143.0	—	102.7	—
65-74 years	297.2	—	201.1	—
75-84 years	361.5	—	240.4	—
85 years +	284.1	—	182.8	—

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>2</sup>	Actual	Adj <sup>2</sup>
Under 1 year	0.0	—	—	—
1-4 years	0.0	—	0.0	—
5-14 years	0.0	—	0.0	—
15-24 years	0.1	—	0.1	—
25-34 years	0.7	—	0.6	—
35-44 years	5.6	—	4.9	—
45-54 years	36.5	—	29.5	—
55-64 years	141.2	—	104.8	—
65-74 years	297.5	—	205.0	—
75-84 years	364.2	—	246.2	—
85 years +	283.7	—	283.7	—

<sup>1</sup> Lung cancer deaths includes deaths due to cancers of the trachea, bronchus and lung, ICD-9 codes 162.0 to 162.9.

<sup>2</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

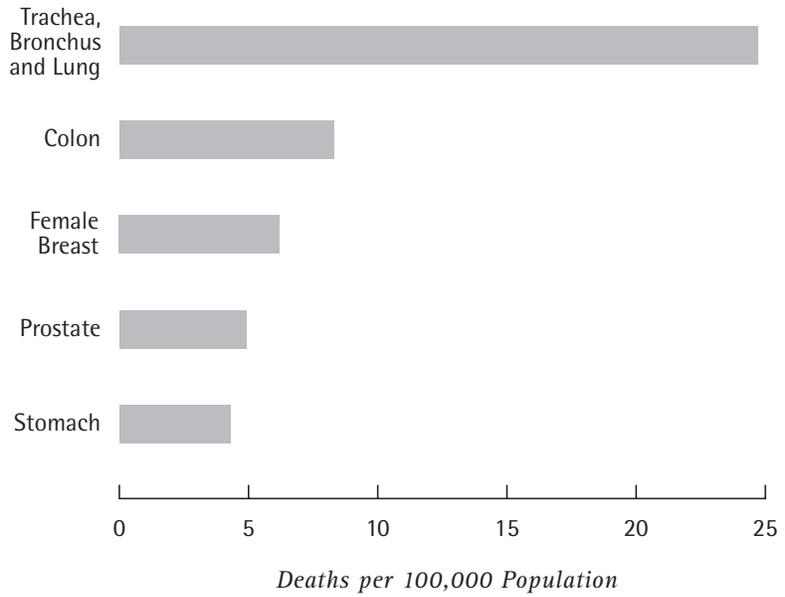
**Note:** — Represents zero. 0.0 rounds to zero.

Part 4 General Mortality Statistics

Chart 4.37

*Death Rates for Leading Cancer Sites, American Indians and Alaska Natives (1994-1996)*

The leading site for cancer deaths among Indians in 1994-1996 was trachea, bronchus, and lung. Three times as many Indian people died of this type of cancer than the next leading site, colon. The third and fourth leading sites were female breast and prostate, respectively. These Indian counts have been adjusted for miscoding of Indian race on death certificates.



## Part 4 General Mortality Statistics

**Table 4.37**

*Leading Sites for Cancer Deaths for Decedents of All Ages*

American Indians and Alaska Natives, IHS Service Area, 1994-1996  
(Rate per 100,000 Population)

Site of Cancer Death	Number		Rate	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
All Sites	3,413	3,879	83.1	94.4
Trachea, bronchus and lung	840	1,014	20.4	24.7
Colon	286	341	7.0	8.3
Female breast	222	253	5.4	6.2
Prostate	184	203	4.5	4.9
Stomach	157	177	3.8	4.3
Liver	154	167	3.7	4.1
Pancreas	145	162	3.5	3.9
Kidney	141	146	3.4	3.6
Leukemia	110	120	2.7	2.9
Ovary	84	92	2.0	2.2
Multiple myeloma	81	86	2.0	2.1
Rectum, rectosigmoid junction and anus	76	85	1.9	2.1
Esophagus	55	70	1.3	1.7
Cervix uteri	60	69	1.5	1.7
Gallbladder	58	60	1.4	1.5
Brain	52	56	1.3	1.4
Bladder	28	32	0.7	0.8
Connective and other soft tissue	26	30	0.6	0.7
Pharynx	29	29	0.7	0.7
Melanoma of skin	19	22	0.5	0.5
Larynx	21	21	0.5	0.5
Bone and articular cartilage	13	17	0.3	0.4
Thyroid gland	12	13	0.3	0.3
Tongue	9	11	0.2	0.3
Hodgkin's disease	8	9	0.2	0.2
Testis	6	6	0.1	0.1
Small intestine	4	4	0.1	0.1
Lymphosarcoma and reticulosarcoma	3	3	0.1	0.1
Male breast	2	2	0.1	0.1
Penis	2	2	0.1	0.1
All other sites	526	577		

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

**Note:** See appendix titled "Method Used to Rank Leading Sites of Cancer Deaths."  
Causes of death are listed based upon the order of adjusted number of deaths.

Part 4 General Mortality Statistics

Chart 4.38

*Death Rates, Leading Cancer Sites: Males, American Indians and Alaska Natives (1994-1996)*

The leading site for cancer deaths among Indian males in 1994-1996 was trachea, bronchus, and lung. Three times as many Indian males died of this type of cancer than the next leading site, prostate. In turn, the likelihood of dying from prostate cancer was about 22 percent greater than the next leading type of cancer, colon. These Indian counts have been adjusted for miscoding of Indian race on death certificates.

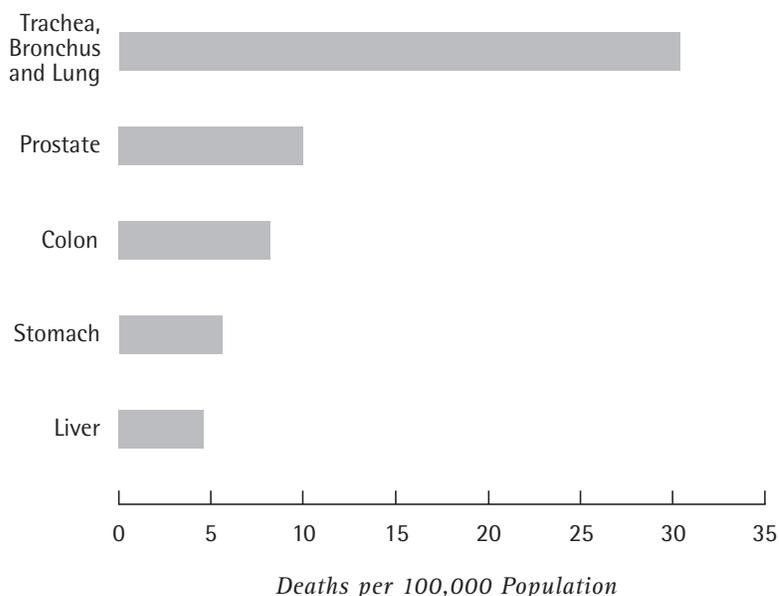
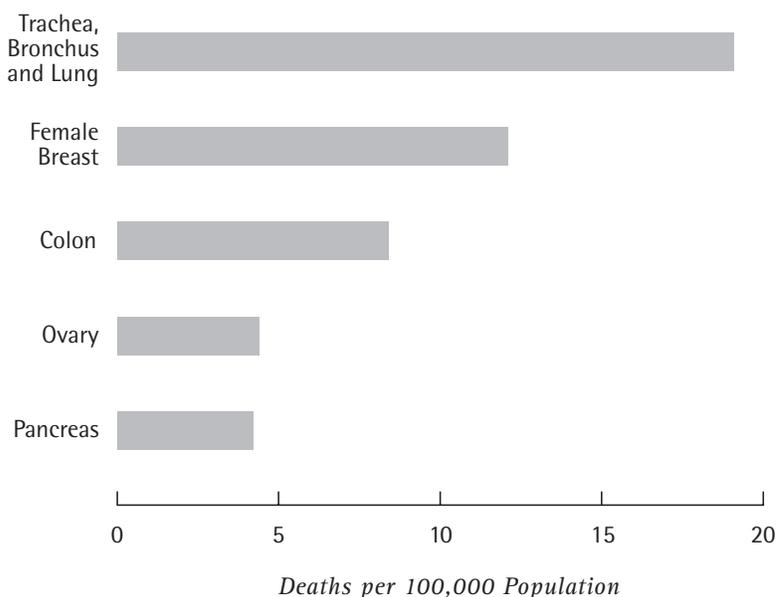


Chart 4.39

*Death Rates, Leading Cancer Sites: Females, American Indians and Alaska Natives (1994-1996)*

The leading site for cancer deaths among Indian females in 1994-1996 was trachea, bronchus, and lung. About 57 percent more Indian females died of this type of cancer than the next leading site, breast. In turn, the likelihood of dying from breast cancer was about 46 percent greater than the next leading type of cancer, colon. These Indian counts have been adjusted for miscoding of Indian race on death certificates.



## Part 4 General Mortality Statistics

**Table 4.38**

### Leading Sites for Cancer Deaths by Sex

American Indians and Alaska Natives, IHS Service Area, 1994-1996  
(Rate per 100,000 Population)

MALE					FEMALE				
Site of Cancer Death	Number		Rate		Site of Cancer Death	Number		Rate	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>		Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
All Sites	1,709	1,936	84.4	95.7	All Sites	1,703	1,943	81.7	93.2
Trachea, bronchus and lung	511	616	25.2	30.4	Trachea, bronchus and lung	329	398	15.8	19.1
Prostate	184	203	9.1	10.0	Female breast	222	253	10.7	12.1
Colon	137	166	6.8	8.2	Colon	149	175	7.2	8.4
Stomach	102	113	5.0	5.6	Ovary	84	92	4.0	4.4
Liver	85	93	4.2	4.6	Pancreas	78	88	3.7	4.2
Kidney	84	88	4.2	4.3	Liver	69	74	3.3	3.6
Pancreas	67	74	3.3	3.7	Cervix uteri	60	69	2.9	3.3
Esophagus	48	60	2.4	3.0	Leukemia	61	69	2.9	3.3
Leukemia	49	51	2.4	2.5	Stomach	55	64	2.6	3.1
Rectum, rectosigmoid junction and anus	42	45	2.1	2.2	Kidney	57	58	2.7	2.8
Brain	33	35	1.6	1.7	Multiple myeloma	48	51	2.3	2.4
Multiple myeloma	33	35	1.6	1.7	Gallbladder	40	42	1.9	2.0
Pharynx	22	22	1.1	1.1	Rectum, rectosigmoid junction and anus	34	40	1.6	1.9
Gallbladder	18	18	0.9	0.9	Brain	19	21	0.9	1.0
Larynx	16	16	0.8	0.8	Connective and other soft tissue	15	19	0.7	0.9
Bladder	16	16	0.8	0.8	Melanoma of skin	13	16	0.6	0.8
Connective and other soft tissue	11	11	0.5	0.5	Bladder	12	16	0.6	0.8
Melanoma of skin	6	6	0.3	0.3	Bone and articular cartilage	8	11	0.4	0.5
Bone and articular cartilage	5	6	0.2	0.3	Esophagus	7	10	0.3	0.5
Testis	6	6	0.3	0.3	Thyroid gland	7	8	0.3	0.4
Thyroid gland	5	5	0.2	0.2	Pharynx	7	7	0.3	0.3
Tongue	4	5	0.2	0.2	Tongue	5	6	0.2	0.3
Hodgkin's disease	3	3	0.1	0.1	Hodgkin's disease	5	6	0.2	0.3
Male breast	2	2	0.1	0.1	Larynx	5	5	0.2	0.2
Penis	2	2	0.1	0.1	Small intestine	3	3	0.1	0.1
Small intestine	1	1	0.1	0.1	Lymphosarcoma and reticulosarcoma	2	2	0.1	0.1
Lymphosarcoma and reticulosarcoma	1	1	0.1	0.1	All other sites	309	340		
All other sites	216	237							

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

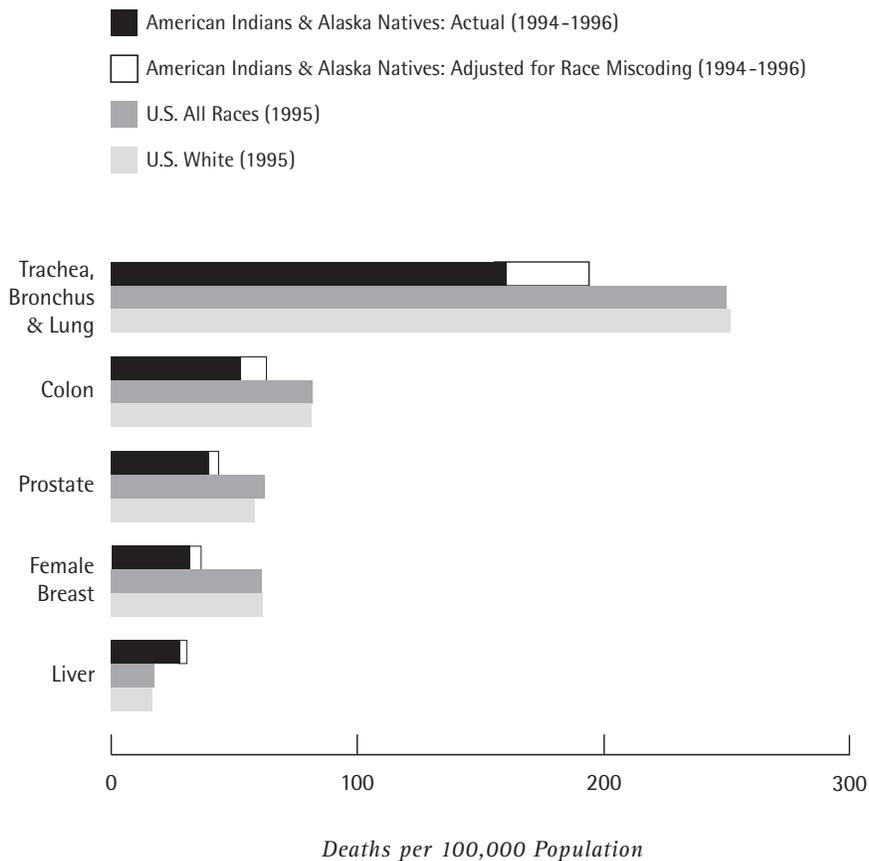
**Note:** See appendix titled "Method Used to Rank Leading Sites of Cancer Deaths." Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4** *General Mortality Statistics*

**Chart 4.40**

*Death Rates,  
Leading Cancer Sites:  
Ages 55+ Years*

The leading site for cancer deaths among Indians, 55 years and older, in 1994-1996 was trachea, bronchus, and lung. About 3 times as many Indian people in this age group died of this type of cancer than the next leading site, colon. The third and fourth leading sites were prostate and female breast, respectively. These Indian counts have been adjusted for miscoding of Indian race on death certificates.



## Part 4 General Mortality Statistics

**Table 4.40**

### Leading Sites for Cancer Deaths for Decedents, 55 Years Old and Older

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

Site of Cancer Death	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio <sup>1</sup> of American Indian and Alaska Native to:	
	Number		Rate				U.S. All Races	U.S. White
	Actual	Adjusted <sup>1</sup>	Actual	Adjusted <sup>1</sup>	Rate	Rate		
All Sites	2,728	2,963	595.2	646.5	858.6	855.5	0.8	0.8
Trachea, bronchus and lung	735	890	160.4	194.2	249.8	251.4	0.8	0.8
Colon	241	286	52.6	62.4	81.8	81.4	0.8	0.8
Prostate	182	201	39.7	43.9	62.4	58.4	0.7	0.8
Female breast	146	165	31.9	36.0	61.3	61.7	0.6	0.6
Liver	129	139	28.2	30.3	17.7	16.6	1.7	1.8
Pancreas	122	139	26.6	30.3	44.5	44.0	0.7	0.7
Stomach	120	137	26.2	29.9	21.9	19.7	1.4	1.5
Kidney	118	121	25.8	26.4	18.1	18.6	1.5	1.4
Multiple myeloma	70	75	15.3	16.4	17.3	16.2	0.9	1.0
Rectum, rectosigmoid junction and anus	59	65	12.9	14.2	13.6	13.7	1.0	1.0
Leukemia	59	62	12.9	13.5	30.1	31.2	0.4	0.4
Esophagus	45	58	9.8	12.7	17.5	16.5	0.7	0.8
Ovary	53	56	11.6	12.2	21.0	21.8	0.6	0.6
Gallbladder	51	52	11.1	11.4	6.5	6.6	1.8	1.7
Cervix uteri	28	31	6.1	6.8	4.6	3.9	1.5	1.7
Bladder	27	31	5.9	6.8	19.4	20.1	0.4	0.4
Brain	27	29	5.9	6.3	14.8	15.7	0.4	0.4
Pharynx	19	19	4.2	4.2	5.7	5.2	0.7	0.8
Larynx	19	19	4.2	4.2	6.1	5.7	0.7	0.7
Connective and other soft tissue	13	15	2.8	3.3	4.7	4.7	0.7	0.7
Melanoma of skin	11	11	2.4	2.4	8.9	9.9	0.3	0.2
Thyroid gland	10	11	2.2	2.4	1.8	1.9	1.3	1.3
Tongue	7	8	1.5	1.8	2.7	2.7	0.7	0.7
Bone and articular cartilage	4	6	0.9	1.3	1.3	1.3	1.0	1.0
Small intestine	2	2	0.4	0.4	1.7	1.6	0.2	0.3
Male breast	2	2	0.4	0.4	0.6	0.5	0.7	0.8
Penis	2	2	0.4	0.4	0.4	0.4	1.0	1.0
Lymphosarcoma and reticulosarcoma	2	2	0.4	0.4	1.5	1.6	0.3	0.3
Hodgkin's disease	1	1	0.2	0.2	1.4	1.4	0.1	0.1
All other sites	424	328						

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

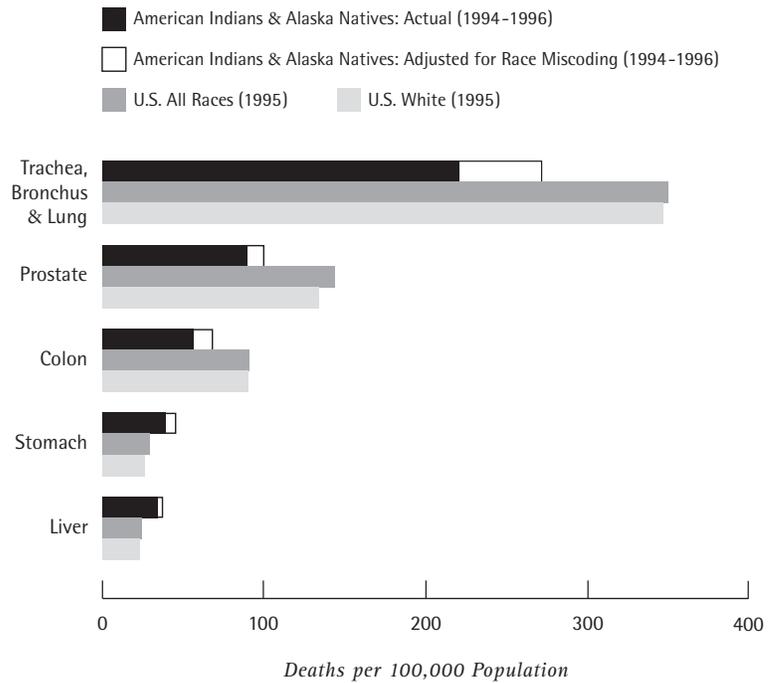
**Note:** See appendix "Method Used to Rank Leading Sites of Cancer Deaths."  
Causes of death are listed based upon the order of adjusted number of deaths.

**Part 4** *General Mortality Statistics*

**Chart 4.41**

*Death Rates, Leading Cancer Sites: Males, 55+ Years*

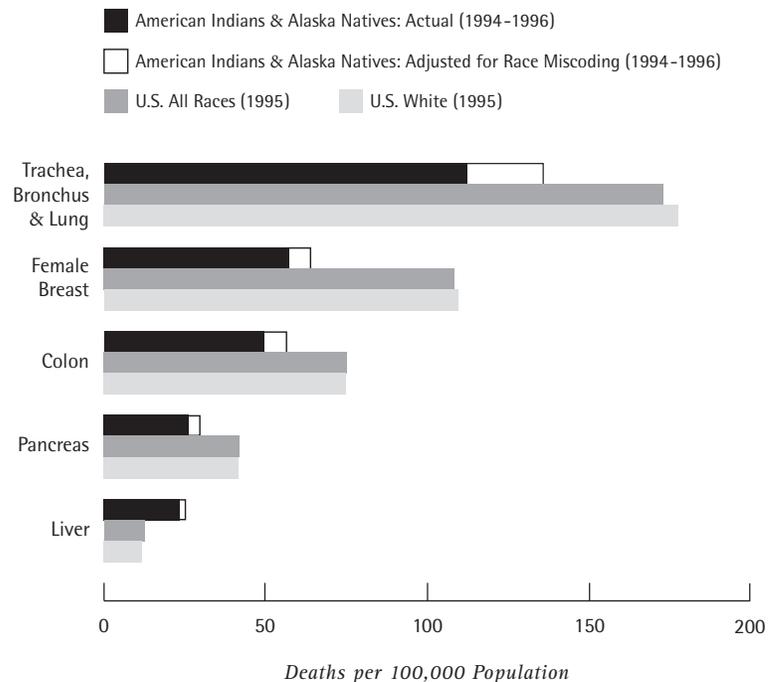
The leading site for cancer deaths among Indian males, 55 years and older, in 1994-1996 was trachea, bronchus, and lung. About 2.7 times as many Indian males in this age group died of this type of cancer than the next leading site, prostate. In turn, the likelihood of dying from prostate cancer was about 45 percent greater than the next leading type of cancer, colon. These Indian counts have been adjusted for miscoding of Indian race on death certificates.



**Chart 4.42**

*Death Rates, Leading Cancer Sites: Females, 55+ Years*

The leading site for cancer deaths among Indian females, 55 years and older, in 1994-1996 was trachea, bronchus, and lung. About 2.1 times as many Indian females in this age group died of this type of cancer than the next leading site, breast. In turn, the likelihood of dying from breast cancer was about 12 percent greater than the next leading type of cancer, colon. These Indian counts have been adjusted for miscoding of Indian race on death certificates.



## Part 4 General Mortality Statistics

**Table 4.41**

*Leading Sites for Cancer Deaths by Sex, 55 Years Old and Older*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

Site of Cancer Death	American Indian and Alaska Native				U.S. All Races	U.S. White	Ratio <sup>1</sup> of American Indian and Alaska Native to:	
	Number		Rate				U.S. All Races	U.S. White
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Rate	Rate		
<b>MALE</b>								
All Sites	1,416	1,619	695.6	795.4	1,044.8	1,028.9	0.8	0.8
Trachea, bronchus and lung	449	547	220.6	268.7	350.1	346.8	0.8	0.8
Prostate	182	201	89.4	98.8	143.8	133.9	0.7	0.7
Colon	115	139	56.5	68.3	90.6	89.9	0.8	0.8
Stomach	79	89	38.8	43.7	29.2	26.4	1.5	1.7
Liver	69	76	33.9	37.3	24.3	22.8	1.5	1.6
Kidney	67	69	32.9	33.9	24.5	25.0	1.4	1.4
Pancreas	55	62	27.0	30.5	47.7	47.2	0.6	0.6
Esophagus	40	50	19.7	24.6	30.2	28.4	0.8	0.9
Rectum, rectosigmoid junction and anus	32	34	15.7	16.7	16.6	16.6	1.0	1.0
Multiple myeloma	28	30	13.8	14.7	39.3	18.6	0.4	0.8
Leukemia	27	27	13.3	13.3	38.2	39.5	0.3	0.3
Brain	17	18	8.4	8.8	17.5	18.6	0.5	0.5
Gallbladder	17	17	8.4	8.4	5.5	5.5	1.5	1.5
Bladder	15	15	7.4	7.4	30.2	31.8	0.2	0.2
Pharynx	14	14	6.9	6.9	8.9	8.0	0.8	0.9
Larynx	14	14	6.9	6.9	11.2	10.4	0.6	0.7
Connective and other soft tissue	6	7	3.0	3.4	5.2	5.3	0.7	0.6
Melanoma of skin	5	5	2.5	2.5	12.7	14.1	0.2	0.2
Tongue	3	4	1.5	2.0	4.0	3.9	0.5	0.5
Thyroid gland	3	3	1.5	1.5	1.6	1.7	0.9	0.9
Bone and articular cartilage	2	3	1.0	1.5	1.6	1.5	0.9	1.0
Penis	2	2	1.0	1.0	0.8	0.8	1.3	1.3
Male breast	2	2	1.0	1.0	1.3	1.2	0.8	0.8
Small intestine	1	1	0.5	0.5	2.1	2.1	0.2	0.2
All other sites	172	190						
<b>FEMALE</b>								
All Sites	1,321	1,492	518.5	585.6	715.6	721.1	0.8	0.8
Trachea, bronchus and lung	286	343	112.3	134.6	172.9	177.6	0.8	0.8
Female breast	146	165	57.3	64.8	108.4	109.5	0.6	0.6
Colon	126	147	49.5	57.7	75.1	74.8	0.8	0.8
Pancreas	67	77	26.3	30.2	42.1	41.6	0.7	0.7
Liver	60	63	23.6	24.7	12.6	11.9	2.0	2.1
Ovary	53	56	20.8	22.0	37.2	38.8	0.6	0.6
Kidney	51	52	20.0	20.4	13.3	13.5	1.5	1.5
Stomach	41	48	16.1	18.8	16.2	14.5	1.2	1.3
Multiple myeloma	42	45	16.5	17.7	29.5	14.3	0.6	1.2
Gallbladder	34	35	13.3	13.7	7.2	7.3	1.9	1.9
Leukemia	32	35	12.6	13.7	23.8	24.8	0.6	0.6
Cervix uteri	28	31	11.0	12.2	8.1	6.9	1.5	1.8
Rectum, rectosigmoid junction and anus	27	31	10.6	12.2	11.4	11.5	1.1	1.1
Bladder	12	16	4.7	6.3	11.1	11.1	0.6	0.6
Brain	10	11	3.9	4.3	12.6	13.5	0.3	0.3
Connective and other soft tissue	7	8	2.8	3.1	4.4	4.3	0.7	0.7
Thyroid gland	7	8	2.8	3.1	2.0	2.0	1.6	1.6
Esophagus	5	8	2.0	3.1	7.8	7.3	0.4	0.4
Melanoma of skin	6	6	2.4	2.4	6.0	6.7	0.4	0.4
Pharynx	5	5	2.0	2.0	3.3	3.1	0.6	0.6
Larynx	5	5	2.0	2.0	2.3	2.2	0.9	0.9
Tongue	4	4	1.6	1.6	1.7	1.7	0.9	0.9
Bone and articular cartilage	2	3	0.8	1.2	1.1	1.1	1.1	1.1
Lymphosarcoma and reticulosarcoma	2	2	0.8	0.8	1.3	1.4	0.6	0.6
Small intestine	1	1	0.4	0.4	1.3	1.3	0.3	0.3
Hodgkin's disease	1	1	0.4	0.4	1.2	1.3	0.3	0.3
All other sites	261	286						

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

**Note:** See appendix "Method Used to Rank Leading Sites of Cancer Deaths." Causes of death are listed based upon the order of adjusted number of deaths.

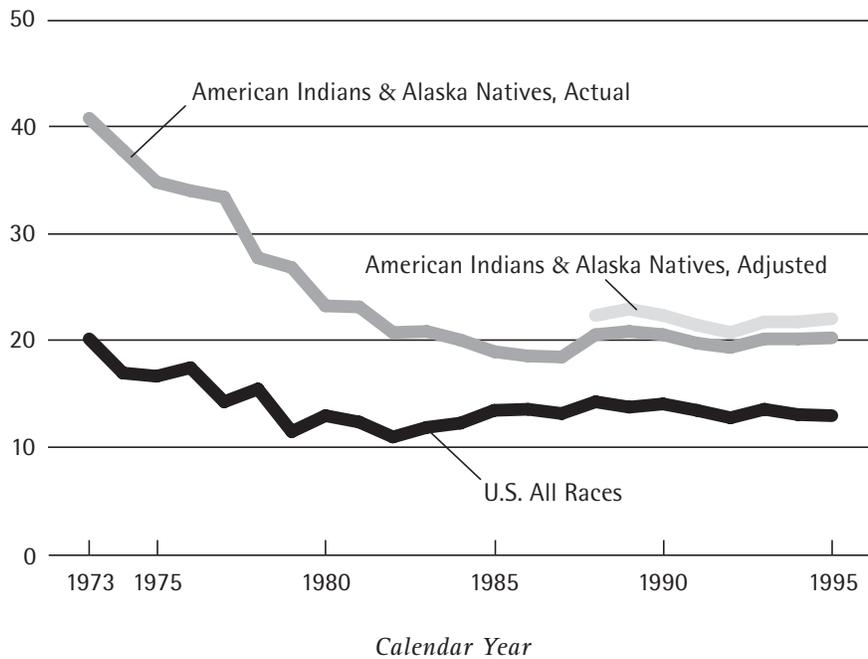
Part 4 General Mortality Statistics

Chart 4.43

Age-Adjusted Pneumonia and Influenza Death Rates

The age-adjusted pneumonia and influenza death rate for American Indians and Alaska Natives varied between 40.8 and 22.0 between 1972-1974 and 1994-1996. In 1986-1988, it rose to 18.4 and in 1994-1996 to 22.0. The 1994-1996 rate is 1.7 times the U.S. All Races rate of 12.9 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.

Per 100,000 Population



Part 4 General Mortality Statistics

Table 4.43

*Pneumonia and Influenza Deaths and Death Rates*

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted		
(1996)	278	309								
1994-1996 (1995)	265	282	20.2	22.0	12.9	12.4	1.6	1.7	1.6	1.8
1993-1995 (1994)	297	321	20.1	21.7	13.0	12.5	1.5	1.7	1.6	1.7
1992-1994 (1993)	265	286	20.1	21.7	13.5	12.9	1.5	1.6	1.7	1.7
1991-1993 (1992)	241	256	19.3	20.7	12.7	12.1	1.5	1.6	1.6	1.7
1990-1992 (1991)	237	257	19.7	21.4	13.4	12.8	1.5	1.6	1.5	1.7
1989-1991 (1990)	259	286	20.5	22.3	14.0	13.4	1.5	1.6	1.5	1.7
1988-1990 (1989)	248	242	20.8	22.9	13.7	13.0	1.5	1.7	1.6	1.8
1987-1989 (1988)	221	238	20.5	22.3	14.2	13.6	1.4	1.6	1.5	1.6
1986-1988 (1987)	220		18.4		13.1	12.5	1.4		1.5	
1985-1987 (1986)	174		18.5		13.5	12.9	1.4		1.4	
1984-1986 (1985)	206		18.9		13.4	12.8	1.4		1.5	
1983-1985 (1984)	200		20.0		12.2	11.6	1.6		1.7	
1982-1984 (1983)	170		20.8		11.8	11.3	1.8		1.8	
1981-1983 (1982)	202		20.7		10.9	10.3	1.9		2.0	
1980-1982 (1981)	181		23.1		12.3	11.6	1.9		2.0	
1979-1981 (1980)	215		23.2		12.9	12.2	1.8		1.9	
1978-1980 (1979)	174		26.8		11.4	10.7	2.4		2.5	
1977-1979 (1978)	241		27.7		15.4	14.5	1.8		1.9	
1976-1978 (1977)	193		33.4		14.2	13.2	2.4		2.5	
1975-1977 (1976)	259		34.0		17.4	16.3	2.0		2.1	
1974-1976 (1975)	225		34.8		16.6	15.6	2.1		2.2	
1973-1975 (1974)	187		37.8		16.9	15.7	2.2		2.4	
1972-1974 (1973)	269		40.8		20.1	18.5	2.0		2.2	
(1972)	234				20.8	19.2				
1954-1956 (1955)	384		64.4		21.0	18.4	3.1		3.5	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

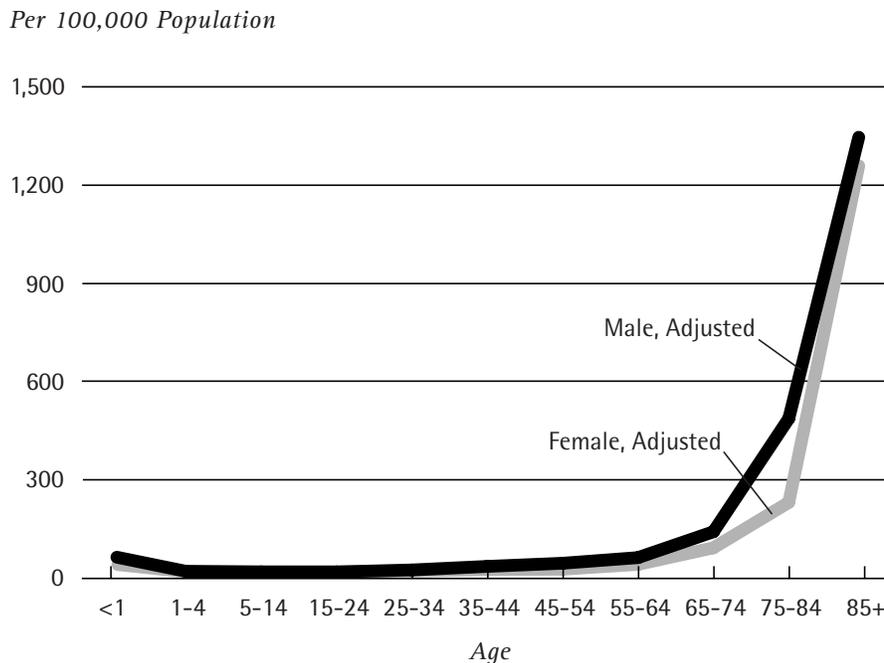
**Note:** Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.44

*Pneumonia and Influenza Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific pneumonia and influenza death rate (1994-1996) for Indian males and females increased sharply with age starting with age 15. The Indian male rate was greater than the Indian female rate for all age groups except 5 to 24 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.44**

*Pneumonia and Influenza Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996 and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	29.7	36.2	42.3	47.8	16.9	24.4
1-4 years	1.6	1.8	2.0	2.5	1.1	1.1
5-14 years	0.7	1.0	0.4	0.4	0.9	1.4
15-24 years	0.5	0.7	0.3	0.5	0.8	0.8
25-34 years	4.2	5.0	5.9	6.5	2.5	3.7
35-44 years	11.5	12.3	16.3	17.4	7.1	7.4
45-54 years	16.3	17.5	25.1	27.0	8.3	8.8
55-64 years	31.3	33.1	41.3	44.2	22.6	23.4
65-74 years	87.5	95.7	112.2	123.1	67.9	74.1
75-84 years	282.8	315.6	419.1	468.8	191.1	212.6
85 years +	1,302.4	1,338.2	1,324.2	1,380.0	1,289.8	1,314.0

U.S. All Races			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	12.8		11.3
1-4 years	1.0		1.1
5-14 years	0.3		0.4
15-24 years	0.6		0.5
25-34 years	1.5		1.2
35-44 years	3.5		2.6
45-54 years	6.7		4.8
55-64 years	16.4		12.4
65-74 years	57.2		43.0
75-84 years	233.2		187.5
85 years +	1,035.7		937.9

U.S. White			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	10.1		9.0
1-4 years	0.7		0.8
5-14 years	0.3		0.3
15-24 years	0.5		0.4
25-34 years	1.2		1.0
35-44 years	2.8		2.1
45-54 years	5.5		4.2
55-64 years	14.7		11.4
65-74 years	55.0		41.8
75-84 years	232.1		187.3
85 years +	1,055.5		958.4

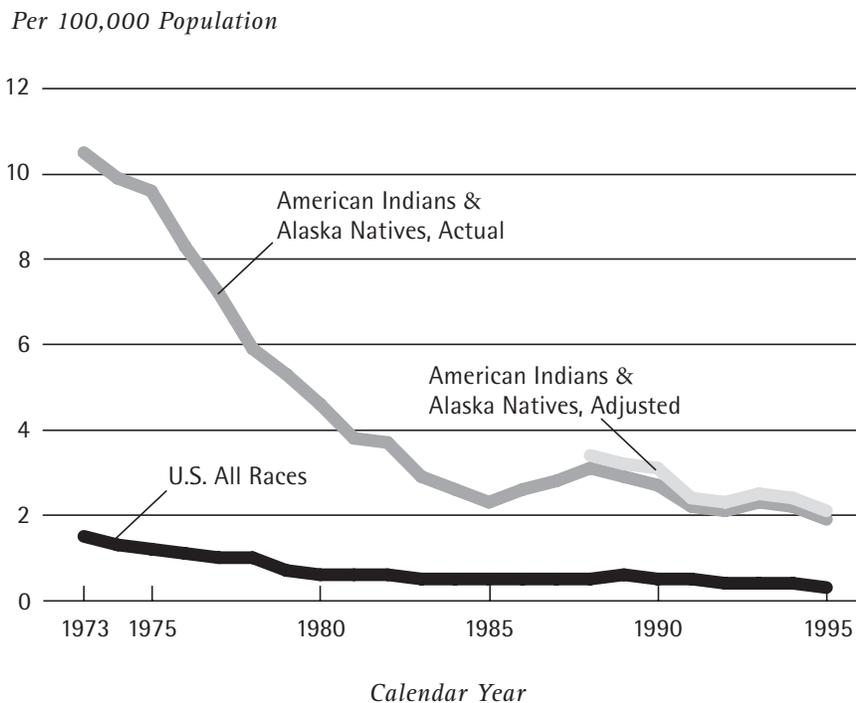
<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

Part 4 General Mortality Statistics

Chart 4.45

Age-Adjusted Tuberculosis Death Rates

The age-adjusted tuberculosis death rate for American Indians and Alaska Natives has dropped from 10.5 deaths per 100,000 population in 1972-1974 to 1.9 in 1994-1996, a decrease of 82 percent. The 1994-1996 rate is over 6 times the U.S. All Races rate of 0.3 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.45

Tuberculosis Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted		
(1996)	14	14								
1994-1996 (1995)	18	19	1.9	1.9	0.3	0.2	6.3	6.3	9.5	9.5
1993-1995 (1994)	30	30	2.2	2.2	0.4	0.2	5.5	5.5	5.5	11.0
1992-1994 (1993)	24	24	2.3	2.3	0.4	0.3	5.8	5.8	7.7	7.7
1991-1993 (1992)	19	19	2.1	2.1	0.4	0.3	5.3	5.3	7.0	7.0
1990-1992 (1991)	25	25	2.2	2.2	0.5	0.3	4.4	4.4	7.3	7.3
1989-1991 (1990)	24	25	2.7	2.9	0.5	0.3	5.4	5.8	9.0	9.7
1988-1990 (1989)	33	36	2.9	3.0	0.6	0.3	4.8	5.0	9.7	10.0
1987-1989 (1988)	25	25	3.1	3.2	0.5	0.3	6.2	6.4	10.3	10.7
1986-1988 (1987)	28	28	2.8		0.5	0.3	5.6		9.3	
1985-1987 (1986)	24		2.6		0.5	0.3	5.2		8.7	
1984-1986 (1985)	18		2.3		0.5	0.3	4.6		7.7	
1983-1985 (1984)	17		2.6		0.5	0.3	5.2		8.7	
1982-1984 (1983)	30		2.9		0.5	0.3	5.8		9.7	
1981-1983 (1982)	22		3.7		0.6	0.4	6.2		9.3	
1980-1982 (1981)	30		3.8		0.6	0.4	6.3		9.5	
1979-1981 (1980)	31		4.6		0.6	0.4	7.7		11.5	
1978-1980 (1979)	33		5.3		0.7	0.4	7.6		13.3	
1977-1979 (1978)	40		5.9		1.0	0.7	5.9		8.4	
1976-1978 (1977)	33		7.2		1.0	0.7	7.2		10.3	
1975-1977 (1976)	48		8.3		1.1	0.8	7.5		10.4	
1974-1976 (1975)	53		9.6		1.2	0.9	8.0		12.0	
1973-1975 (1974)	48		9.9		1.3	0.9	7.6		11.0	
1972-1974 (1973)	45		10.5		1.5	1.1	7.0		9.5	
(1972)	50									
1954-1956 (1955)	253		57.9		8.4	6.2	6.9		9.3	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

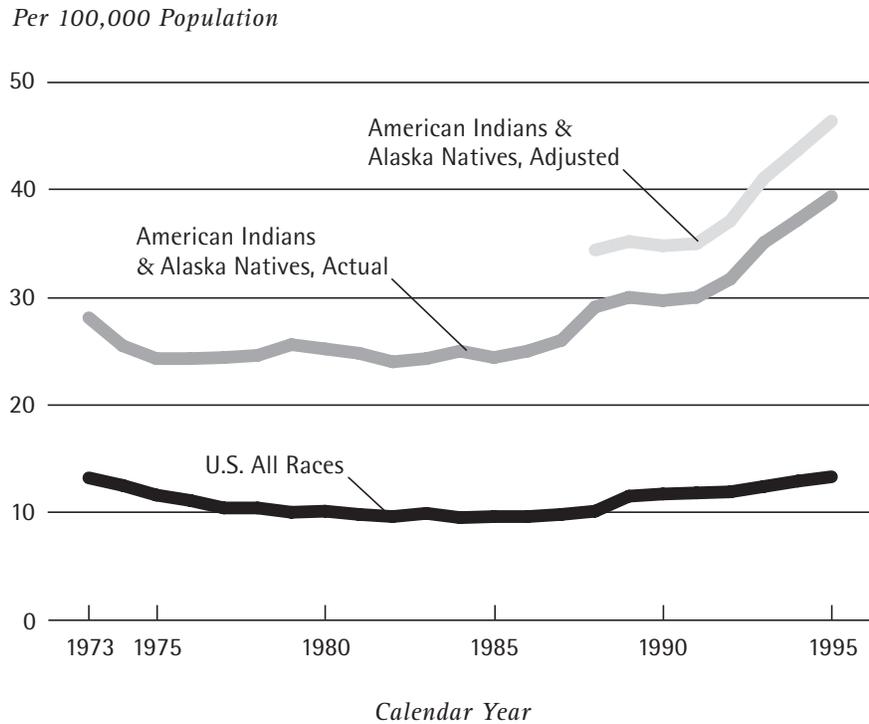
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation States data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.46

Age-Adjusted  
Diabetes Mellitus  
Death Rates

The age-adjusted diabetes mellitus death rate for American Indians and Alaska Natives varied between 28.1 and 35.0 between 1972-1974 and 1990-1992. In 1991-1993, it rose to 31.7 and in 1994-1996 to 46.4. The 1994-1996 rate is 3.5 times the U.S. All Races rate of 13.3 for 1995. This is the highest U.S. rate since 1974, when the rate was 13.2. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.46

Diabetes Mellitus Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted		
(1996)	449	527								
1994-1996 (1995)	426	497	39.4	46.4	13.3	11.7	3.0	3.5	3.4	4.0
1993-1995 (1994)	399	467	37.2	43.7	12.9	11.5	2.9	3.4	3.2	3.8
1992-1994 (1993)	354	412	35.1	41.1	12.4	11.0	2.8	3.3	3.2	3.7
1991-1993 (1992)	324	373	31.7	37.1	11.9	10.5	2.7	3.1	3.0	3.5
1990-1992 (1991)	275	320	30.0	35.0	11.8	10.5	2.5	3.0	2.9	3.3
1989-1991 (1990)	285	330	29.7	34.8	11.7	10.4	2.5	3.0	2.9	3.3
1988-1990 (1989)	301	349	30.0	35.2	11.5	10.3	2.6	3.1	2.9	3.4
1987-1989 (1988)	260	303	29.1	34.4	10.1	9.0	2.9	3.4	3.2	3.8
1986-1988 (1987)	227	274	26.0		9.8	8.7	2.7		3.0	
1985-1987 (1986)	195		25.0		9.6	8.5	2.6		2.9	
1984-1986 (1985)	208		24.4		9.6	8.6	2.5		2.8	
1983-1985 (1984)	189		25.0		9.5	8.5	2.6		2.9	
1982-1984 (1983)	179		24.3		9.9	8.9	2.5		2.7	
1981-1983 (1982)	164		24.0		9.6	8.7	2.5		2.8	
1980-1982 (1981)	156		24.8		9.8	8.8	2.5		2.8	
1979-1981 (1980)	173		25.2		10.1	9.1	2.5		2.8	
1978-1980 (1979)	153		25.6		10.0	9.0	2.6		2.8	
1977-1979 (1978)	147		24.6		10.4	9.4	2.4		2.6	
1976-1978 (1977)	133		24.4		10.4	9.4	2.3		2.6	
1975-1977 (1976)	125		24.3		11.1	10.0	2.2		2.4	
1974-1976 (1975)	123		24.3		11.6	10.4	2.1		2.3	
1973-1975 (1974)	110		25.5		12.5	11.4	2.0		2.2	
1972-1974 (1973)	117		28.1		13.2	11.8	2.1		2.4	
(1972)	129									
1954-1956 (1955)	64		17.0		13.0	12.6	1.3		1.3	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

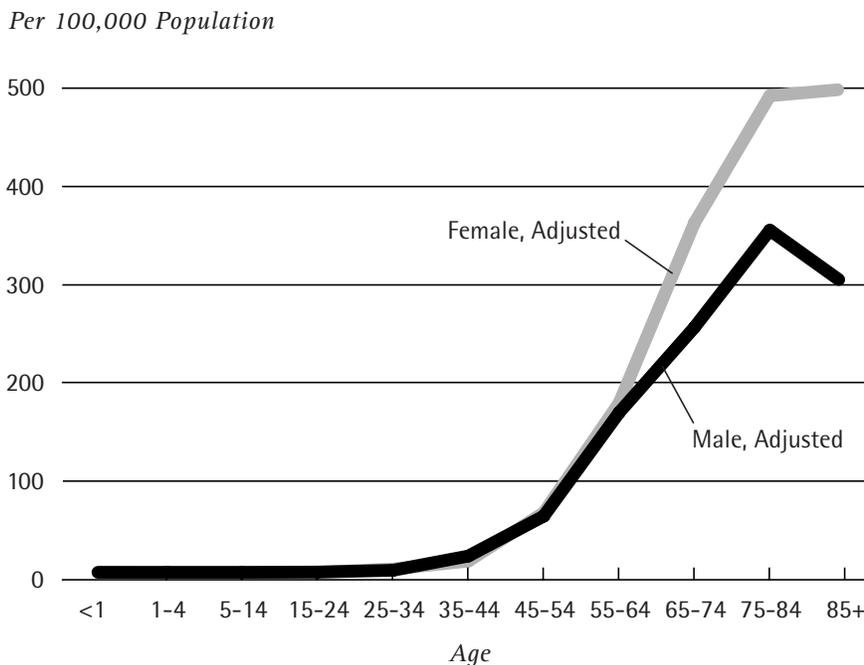
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation States data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

**Part 4** *General Mortality Statistics*

**Chart 4.47**

*Diabetes Mellitus Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific diabetes mellitus death rate (1994-1996) for Indian females increased sharply with age. The same was true for Indian males until the 85 years and over age group. Starting with age groups over 44 years, the Indian female rate was greater than the Indian male rate. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.47**

*Diabetes Mellitus Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996 and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	—	—	—	—	—	—
5-14 years	—	—	—	—	—	—
15-24 years	0.1	0.1	0.3	0.3	—	—
25-34 years	2.3	2.7	2.1	2.1	2.5	3.4
35-44 years	12.5	14.0	15.9	16.6	9.3	11.5
45-54 years	49.5	59.0	50.1	57.2	48.9	60.7
55-64 years	138.2	167.7	138.4	162.5	138.0	172.3
65-74 years	263.8	308.6	221.2	249.3	297.6	355.6
75-84 years	368.5	429.9	287.7	348.1	422.8	484.9
85 years +	413.7	418.8	292.7	292.7	483.7	491.7

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—
1-4 years	0.0	—	0.0	—
5-14 years	0.0	—	0.0	—
15-24 years	0.4	—	0.3	—
25-34 years	1.5	—	1.3	—
35-44 years	4.3	—	3.6	—
45-54 years	12.9	—	10.7	—
55-64 years	38.8	—	36.3	—
65-74 years	86.6	—	83.3	—
75-84 years	162.8	—	154.1	—
85 years +	278.0	—	273.1	—

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—
1-4 years	0.0	—	—	—
5-14 years	0.0	—	0.0	—
15-24 years	0.3	—	0.2	—
25-34 years	1.3	—	1.1	—
35-44 years	3.8	—	3.1	—
45-54 years	10.7	—	8.7	—
55-64 years	32.6	—	29.2	—
65-74 years	77.3	—	71.9	—
75-84 years	150.9	—	139.5	—
85 years +	264.1	—	258.1	—

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

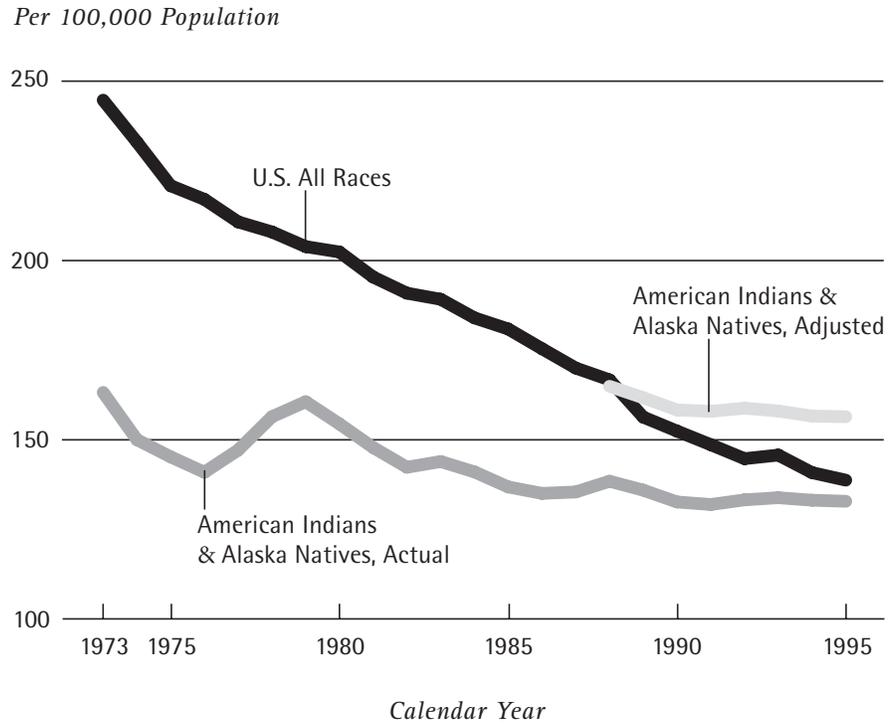
**Note:** — Represents zero. 0.0 rounds to zero.

Part 4 General Mortality Statistics

Chart 4.48

Age-Adjusted  
Heart Disease Death Rates

The age-adjusted heart disease death rate for American Indians and Alaska Natives has been relatively stable since 1987-1989. During this same time period, the U.S. All Races rate decreased 17 percent. The 1994-1996 Indian rate (156.0 deaths per 100,000 population) is 13 percent higher than the U.S. All Races rate of 138.3 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.48

Heart Disease Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S.	U.S.	Ratio of American Indian and Alaska Native to:			
	Number		Rate		Rate	Rate	U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted			Actual	Adjusted	Actual	Adjusted
(1996)	1,600	1,877								
1994-1996 (1995)	1,573	1,852	132.4	156.0	138.3	133.1	1.0	1.1	1.0	1.2
1993-1995 (1994)	1,515	1,754	132.7	156.2	140.4	135.4	0.9	1.1	1.0	1.2
1992-1994 (1993)	1,524	1,779	133.4	157.6	145.3	139.9	0.9	1.1	1.0	1.1
1991-1993 (1992)	1,484	1,764	132.8	158.4	144.3	139.2	0.9	1.1	1.0	1.1
1990-1992 (1991)	1,416	1,682	131.5	157.5	148.2	143.1	0.9	1.1	0.9	1.1
1989-1991 (1990)	1,349	1,599	132.2	157.9	152.0	146.9	0.9	1.0	0.9	1.1
1988-1990 (1989)	1,408	1,661	135.5	161.3	155.9	151.0	0.9	1.0	0.9	1.1
1987-1989 (1988)	1,359	1,600	138.0	164.5	166.3	161.5	0.8	1.0	0.9	1.0
1986-1988 (1987)	1,312	1,553	135.0		169.6	165.0	0.8		0.8	
1985-1987 (1986)	1,190		134.6		175.0	170.4	0.8		0.8	
1984-1986 (1985)	1,223		136.4		180.5	176.1	0.8		0.8	
1983-1985 (1984)	1,206		140.6		183.6	179.5	0.8		0.8	
1982-1984 (1983)	1,117		143.5		188.8	184.6	0.8		0.8	
1981-1983 (1982)	1,102		141.9		190.5	186.8	0.7		0.8	
1980-1982 (1981)	1,000		147.4		195.0	191.1	0.8		0.8	
1979-1981 (1980)	1,096		154.0		202.0	197.6	0.8		0.8	
1978-1980 (1979)	1,096		160.2		203.5	199.8	0.8		0.8	
1977-1979 (1978)	965		156.0		207.6	204.0	0.8		0.8	
1976-1978 (1977)	873		146.7		210.4	206.8	0.7		0.7	
1975-1977 (1976)	798		140.5		216.7	213.5	0.6		0.7	
1974-1976 (1975)	729		144.8		220.5	217.2	0.7		0.7	
1973-1975 (1974)	796		149.6		232.7	228.8	0.6		0.7	
1972-1974 (1973)	716		162.8		244.4	239.9	0.7		0.7	
(1972)	763									
1954-1956 (1955)			223.0		291.3	285.6	0.8		0.8	

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

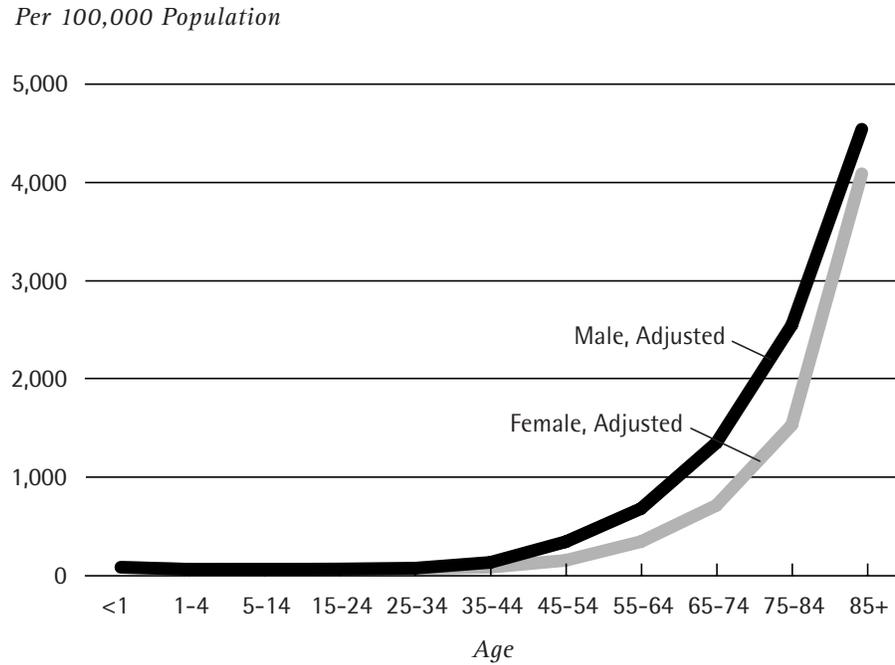
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation States data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.49

*Heart Disease Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific heart disease death rate (1994-1996) for Indian males was greater for all age groups in comparison to Indian females, except for age groups 1 to 4 and 15 to 24 years. The rate for both Indian males and females increased with age starting with age groups over 4 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.49**

*Heart Disease Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	15.8	19.5	16.5	23.9	15.0	15.0
1-4 years	1.6	2.1	1.5	1.5	1.6	2.6
5-14 years	0.7	1.0	1.1	1.8	0.2	0.2
15-24 years	3.2	4.3	3.5	3.8	2.8	4.8
25-34 years	9.1	10.1	11.8	12.6	6.5	7.6
35-44 years	39.7	46.0	62.2	71.3	18.6	22.3
45-54 years	154.9	182.6	238.4	281.4	78.4	92.0
55-64 years	369.5	439.2	523.9	619.0	235.1	282.8
65-74 years	785.2	933.3	1,079.6	1,288.3	551.9	651.9
75-84 years	1,569.6	1,878.1	2,021.0	2,486.2	1,266.1	1,469.2
85 years +	4,070.7	4,377.1	4,167.8	4,627.8	4,014.5	4,232.2

U.S. All Races				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	17.2	17.6	16.8	17.6
1-4 years	1.6	1.7	1.5	1.7
5-14 years	0.8	0.8	0.7	0.8
15-24 years	2.9	3.6	2.2	3.6
25-34 years	8.5	11.4	5.6	11.4
35-44 years	32.1	47.4	17.1	47.4
45-54 years	111.3	169.2	56.1	169.2
55-64 years	324.1	467.1	194.4	467.1
65-74 years	801.8	1,105.1	558.9	1,105.1
75-84 years	2,067.0	2,618.5	1,716.6	2,618.5
85 years +	6,486.5	7,043.8	6,269.5	7,043.8

U.S. White				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	15.0	15.4	14.6	15.4
1-4 years	1.2	1.3	1.2	1.3
5-14 years	0.6	0.7	0.6	0.7
15-24 years	2.2	2.8	1.6	2.8
25-34 years	7.0	9.5	4.4	9.5
35-44 years	27.9	42.5	13.1	42.5
45-54 years	100.4	156.2	46.0	156.2
55-64 years	303.9	444.7	173.6	444.7
65-74 years	776.3	1,083.3	527.3	1,083.3
75-84 years	2,053.0	2,619.5	1,691.2	2,619.5
85 years +	6,581.1	7,169.8	6,354.3	7,169.8

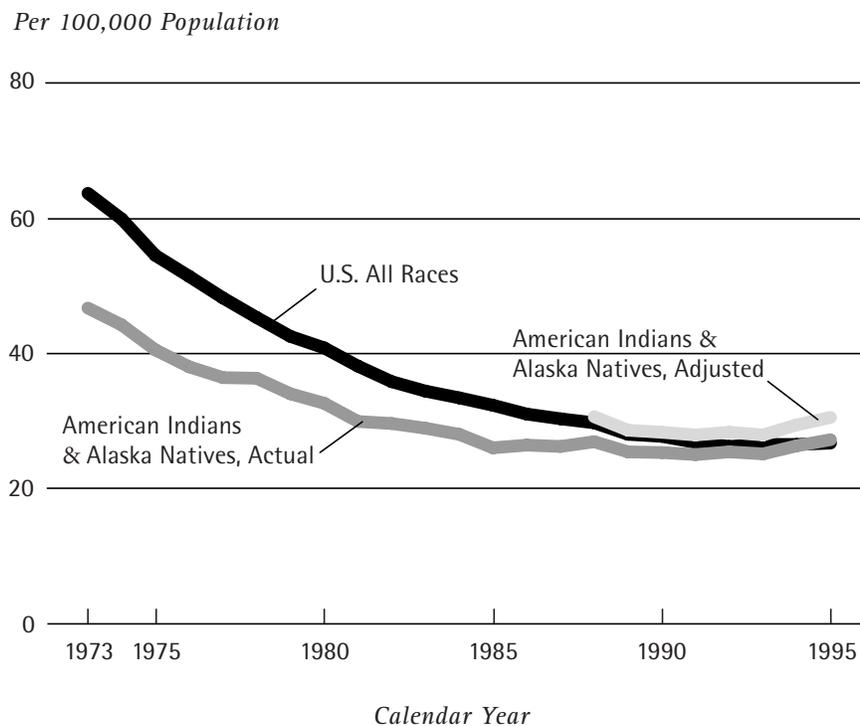
<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

Part 4 General Mortality Statistics

Chart 4.50

Age-Adjusted Cerebrovascular Diseases Death Rates

The age-adjusted cerebrovascular diseases death rate for American Indians and Alaska Natives has been relatively stable since 1987-1989. During this same time period, the U.S. All Races rate decreased 10 percent. The 1994-1996 Indian rate (30.5 deaths per 100,000 population) is 14 percent higher than the U.S. All Races rate of 26.7 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.50

Cerebrovascular Diseases Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted		
(1996)	366	404								
1994-1996 (1995)	358	402	27.2	30.5	26.7	24.7	1.0	1.1	1.1	1.2
1993-1995 (1994)	305	337	26.3	29.4	26.5	24.5	1.0	1.1	1.1	1.2
1992-1994 (1993)	305	335	25.1	27.9	26.5	24.5	0.9	1.1	1.0	1.1
1991-1993 (1992)	288	320	25.4	28.3	26.2	24.2	1.0	1.1	1.0	1.2
1990-1992 (1991)	294	329	25.0	27.9	26.8	24.7	0.9	1.0	1.0	1.1
1989-1991 (1990)	275	307	25.3	28.3	27.7	25.5	0.9	1.0	1.0	1.1
1988-1990 (1989)	270	301	25.4	28.6	28.0	25.9	0.9	1.0	1.0	1.1
1987-1989 (1988)	275	310	26.9	30.6	29.7	27.5	0.9	1.0	1.0	1.1
1986-1988 (1987)	282	327	26.2		30.3	28.1	0.9		0.9	
1985-1987 (1986)	232		26.4		31.0	28.8	0.9		0.9	
1984-1986 (1985)	254		26.0		32.3	30.1	0.8		0.9	
1983-1985 (1984)	245		28.0		33.4	31.1	0.8		0.9	
1982-1984 (1983)	236		28.9		34.4	32.0	0.8		0.9	
1981-1983 (1982)	237		29.6		35.8	33.4	0.8		0.9	
1980-1982 (1981)	241		29.9		38.1	35.6	0.8		0.8	
1979-1981 (1980)	225		32.6		40.8	38.0	0.8		0.9	
1978-1980 (1979)	259		34.0		42.5	39.8	0.8		0.9	
1977-1979 (1978)	227		36.3		45.3	42.5	0.8		0.9	
1976-1978 (1977)	234		36.4		48.2	45.3	0.8		0.8	
1975-1977 (1976)	226		38.0		51.4	48.5	0.7		0.8	
1974-1976 (1975)	215		40.5		54.5	51.3	0.7		0.8	
1973-1975 (1974)	233		44.2		59.9	56.4	0.7		0.8	
1972-1974 (1973)	239		46.7		63.7	59.6	0.7		0.8	
(1972)	209									
1954-1956 (1955)	NA		NA		NA	NA				

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

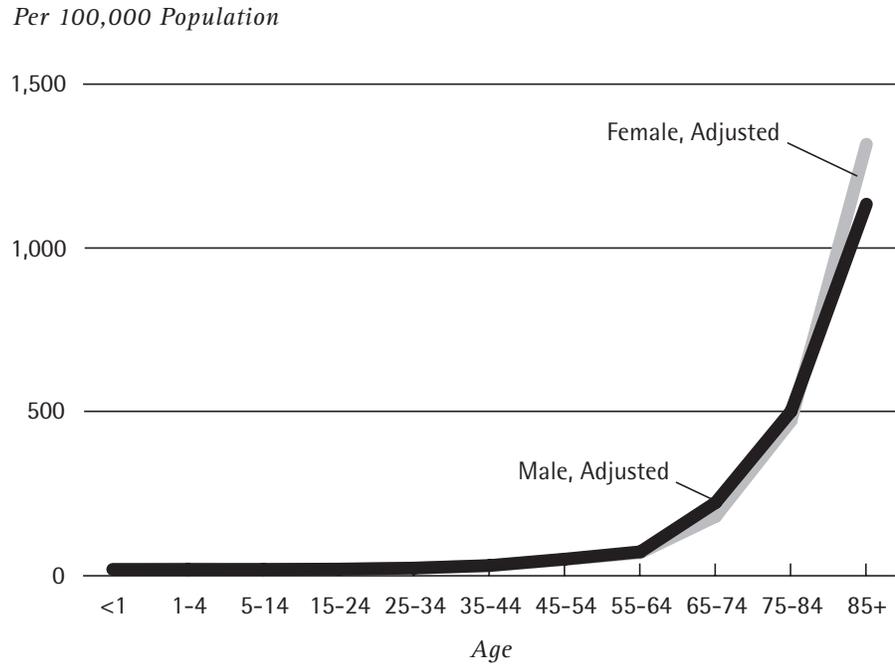
**Note:** NA denotes not available. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Numbers of deaths and rates for U.S. populations are for the single year specified.

Part 4 General Mortality Statistics

Chart 4.51

*Cerebrovascular Diseases Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific cerebrovascular diseases death rate (1994-1996) was relatively close for Indian males and females at each age group. The rate for both Indian males and females increased with age starting with age groups over 25 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.51**

*Cerebrovascular Diseases Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

Age Group	American Indian and Alaska Native					
	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	0.9	—	—	—	1.9	—
1-4 years	0.5	0.8	—	—	1.1	1.6
5-14 years	0.1	0.1	0.2	0.2	—	—
15-24 years	0.7	0.7	1.1	1.1	0.3	0.3
25-34 years	3.0	4.0	3.5	4.1	2.5	3.9
35-44 years	10.5	11.5	11.1	11.9	10.0	11.1
45-54 years	27.1	30.7	29.6	31.5	24.8	30.1
55-64 years	47.4	52.3	49.0	53.8	46.0	51.0
65-74 years	157.7	180.5	177.6	204.1	142.0	161.8
75-84 years	411.3	465.6	429.8	483.0	398.9	453.9
85 years +	1,190.1	1,230.9	1,073.3	1,115.1	1,257.6	1,297.9

Age Group	U.S. All Races		
	Both Sexes	Male	Female
	Under 1 year	5.8	6.3
1-4 years	0.4	0.4	0.3
5-14 years	0.2	0.2	0.2
15-24 years	0.5	0.5	0.4
25-34 years	1.8	1.9	1.7
35-44 years	6.5	7.1	6.0
45-54 years	17.7	19.8	15.6
55-64 years	46.2	53.5	39.6
65-74 years	137.5	156.2	122.5
75-84 years	481.8	517.5	459.2
85 years +	1,637.1	1,538.4	1,675.5

Age Group	U.S. White		
	Both Sexes	Male	Female
	Under 1 year	5.3	6.0
1-4 years	0.3	0.3	0.2
5-14 years	0.2	0.2	0.1
15-24 years	0.4	0.5	0.4
25-34 years	1.5	1.6	1.4
35-44 years	4.8	5.2	4.5
45-54 years	13.8	14.9	12.8
55-64 years	39.0	44.8	33.8
65-74 years	126.7	143.8	112.8
75-84 years	470.7	503.4	449.9
85 years +	1,651.7	1,550.9	1,690.6

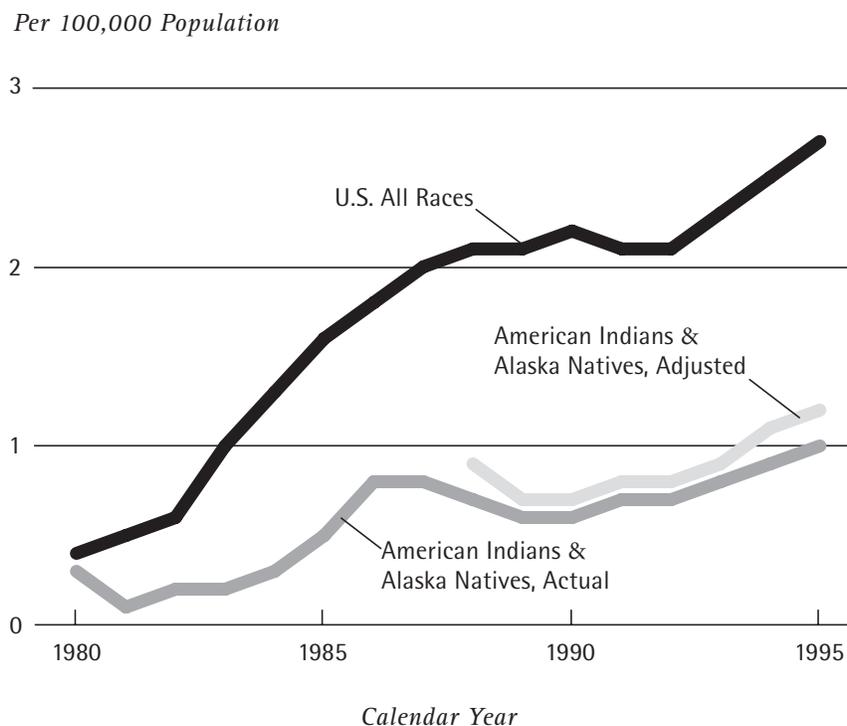
<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates. **Note:** — represents zero

Part 4 General Mortality Statistics

Chart 4.52

Age-Adjusted  
Alzheimer's Disease  
Death Rates

The age-adjusted alzheimer's disease death rate for American Indians and Alaska Natives increased from 0.3 deaths per 100,000 population in 1979-1981 to 1.2 in 1994-1996, an increase of 300 percent. The U.S. All Races rate of 2.7 in 1995 is over 2 times the 1994-1996 American Indian and Alaska Native rate. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.52

Alzheimer's Disease Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1980-1995  
(Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:			
	Number		Rate				U.S. All Races		U.S. White	
	Actual	Adjusted	Actual	Adjusted			Actual	Adjusted	Actual	Adjusted
(1996)	18	24								
1994-1996 (1995)	18	19	1.0	1.2	2.7	2.8	0.4	0.4	0.4	0.4
1993-1995 (1994)	13	15	0.9	1.1	2.5	2.6	0.4	0.4	0.3	0.4
1992-1994 (1993)	12	14	0.8	0.9	2.3	2.4	0.3	0.4	0.3	0.4
1991-1993 (1992)	12	13	0.7	0.8	2.1	2.2	0.3	0.4	0.3	0.4
1990-1992 (1991)	8	9	0.7	0.8	2.1	2.2	0.3	0.4	0.3	0.4
1989-1991 (1990)	8	9	0.6	0.7	2.2	2.3	0.3	0.3	0.3	0.3
1988-1990 (1989)	8	8	0.6	0.7	2.1	2.2	0.3	0.3	0.3	0.3
1987-1989 (1988)	7	9	0.7	0.9	2.1	2.2	0.3	0.4	0.3	0.4
1986-1988 (1987)	10	13	0.8		2.0	2.1	0.4		0.4	
1985-1987 (1986)	9		0.8		1.8	1.9	0.4		0.4	
1984-1986 (1985)	3		0.5		1.6	1.7	0.3		0.3	
1983-1985 (1984)	2		0.3		1.3	1.4	0.2		0.2	
1982-1984 (1983)	4		0.2		1.0	1.1	0.2		0.2	
1981-1983 (1982)	—		0.2		0.6	0.7	0.3		0.3	
1980-1982 (1981)	2		0.1		0.5	0.5	0.2		0.2	
1979-1981 (1980)	1		0.3		0.4	0.4	0.8		0.8	
(1979)	2									

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

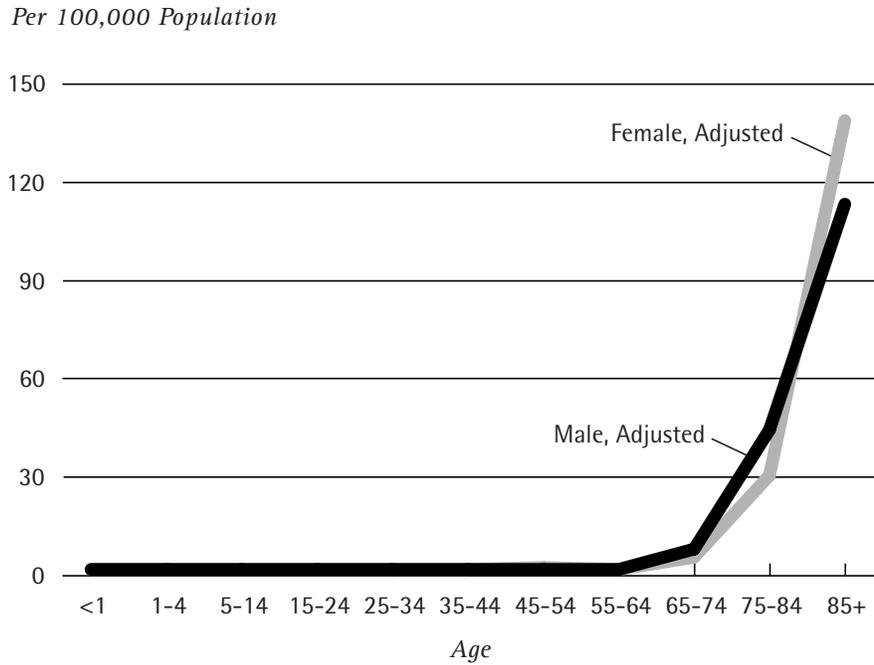
Note: — represents zero

Part 4 General Mortality Statistics

Chart 4.53

*Alzheimer's Disease  
Death Rates by  
Age and Sex*

The age-specific alzheimer's death rate (1994-1996) for Indian males were higher than Indian females in age groups 65 to 84 years. For age group 85 years and over, the Indian female rate was greater than the Indian male rate. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.53**

*Alzheimer's Disease Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

<b>American Indian and Alaska Native</b>						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	—	—	—	—	—	—
5-14 years	—	—	—	—	—	—
15-24 years	—	—	—	—	—	—
25-34 years	—	—	—	—	—	—
35-44 years	—	—	—	—	—	—
45-54 years	0.3	0.3	—	—	0.6	0.6
55-64 years	—	—	—	—	—	—
65-74 years	4.1	4.8	4.7	6.2	3.7	3.7
75-84 years	25.7	34.3	28.4	42.6	23.9	28.7
85 years +	122.6	132.8	111.5	111.5	129.0	137.0

<b>U.S. All Races</b>				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—
1-4 years	—	—	—	—
5-14 years	—	—	—	—
15-24 years	—	—	—	—
25-34 years	—	—	—	—
35-44 years	0.0	0.0	0.0	0.0
45-54 years	0.1	0.1	0.1	0.1
55-64 years	1.6	1.4	1.7	1.7
65-74 years	11.1	11.7	10.6	10.6
75-84 years	73.4	76.1	71.7	71.7
85 years +	274.7	252.6	283.2	283.2

<b>U.S. White</b>				
Age Group	Both Sexes		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—
1-4 years	—	—	—	—
5-14 years	—	—	—	—
15-24 years	—	—	—	—
25-34 years	—	—	—	—
35-44 years	—	—	—	—
45-54 years	0.1	0.1	0.1	0.1
55-64 years	1.6	1.5	1.8	1.8
65-74 years	11.6	12.1	11.2	11.2
75-84 years	75.9	78.5	74.3	74.3
85 years +	286.2	264.8	294.5	294.5

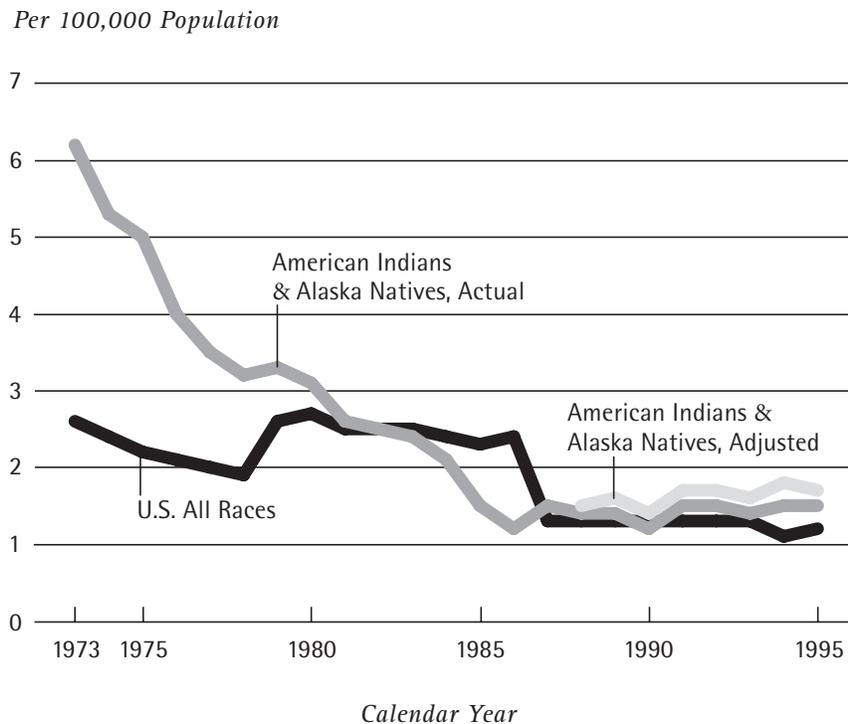
<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates. **Note:** — represents zero. 0.0 rounds to zero.

Part 4 General Mortality Statistics

Chart 4.54

Age-Adjusted  
Gastrointestinal Disease  
Death Rates

The age-adjusted gastrointestinal disease death rate for American Indians and Alaska Natives has decreased 73 percent since the 1972-1974 rate of 6.2 deaths per 100,000 population. The 1994-1996 rate (1.7 deaths per 100,000 population) is 42 percent higher than the U.S. All Races rate of 1.2 for 1995. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



Part 4 General Mortality Statistics

Table 4.54

Gastrointestinal Disease Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1955-1995  
(Age-Adjusted Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native				U.S. All Races Rate	U.S. White Rate	Ratio of American Indian and Alaska Native to:				
	Number		Rate				U.S. All Races		U.S. White		
	Actual	Adjusted	Actual	Adjusted			Actual	Adjusted	Actual	Adjusted	
(1996)	17	20									
1994-1996 (1995)	25	28	1.5	1.7	1.2	1.1	1.3	1.4	1.4	1.4	1.5
1993-1995 (1994)	14	16	1.5	1.8	1.1	1.0	1.4	1.6	1.4	1.4	1.6
1992-1994 (1993)	17	20	1.4	1.6	1.3	1.2	1.1	1.2	1.2	1.2	1.3
1991-1993 (1992)	18	20	1.5	1.7	1.3	1.2	1.2	1.3	1.3	1.3	1.4
1990-1992 (1991)	18	20	1.5	1.7	1.3	1.2	1.2	1.3	1.3	1.3	1.4
1989-1991 (1990)	17	20	1.2	1.4	1.3	1.2	0.9	1.1	1.0	1.0	1.2
1988-1990 (1989)	9	10	1.4	1.6	1.3	1.2	1.1	1.2	1.2	1.2	1.3
1987-1989 (1988)	24	26	1.4	1.5	1.3	1.5	1.1	1.2	0.9	0.9	1.0
1986-1988 (1987)	14	15	1.5		1.3	1.5	1.2		1.0		
1985-1987 (1986)	15		1.2		2.4	1.2	0.5		1.0		
1984-1986 (1985)	13		1.5		2.3	1.3	0.7		1.2		
1983-1985 (1984)	21		2.1		2.4	1.4	0.9		1.6		
1982-1984 (1983)	25		2.4		2.5	1.4	1.0		1.9		
1981-1983 (1982)	18		2.5		2.5	1.2	1.0		2.2		
1980-1982 (1981)	20		2.6		2.5	1.2	1.0		2.2		
1979-1981 (1980)	29		3.1		2.7	1.6	1.2		2.0		
1978-1980 (1979)	29		3.3		2.6	1.8	1.4		2.0		
1977-1979 (1978)	26		3.2		1.9	1.8	1.8		1.9		
1976-1978 (1977)	28		3.5		2.0	1.8	2.1		2.3		
1975-1977 (1976)	37		4.0		2.1	1.9	2.3		2.5		
1974-1976 (1975)	36		5.0		2.2	2.1	2.6		2.8		
1973-1975 (1974)	44		5.3		2.4	2.3	2.5		2.7		
1972-1974 (1973)	37		6.2		2.6	2.4	2.7		2.9		
(1972)	43										
1954-1956 (1955)	165		15.4		3.6	3.1	4.3		5.0		

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

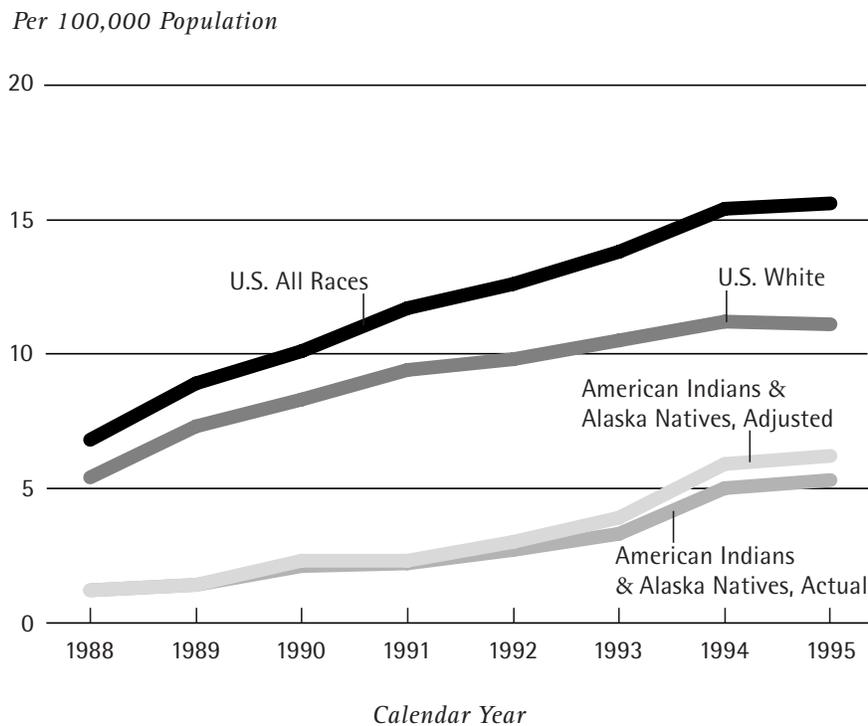
**Note:** Data are presented above for the year in which IHS was established (1955). For this year Reservation State data are shown. Starting in 1972 data are first available, and are shown above, for the specific counties in the IHS service area. Data for these two geographic boundary systems are not directly comparable. American Indian and Alaska Native rates are for the 3-year periods specified. Number of deaths and rates for U.S. populations are for the single year specified. Starting in 1979 cause of death codes which define gastrointestinal deaths were revised to exclude ICD-9 code 557 (vascular insufficiency of intestine). Currently ICD-9 codes that define gastrointestinal disease death includes: 004, 006, 007, 008, 009 535, 555, 556, 558 and 562.

Part 4 General Mortality Statistics

Chart 4.55

Human Immunodeficiency Virus (HIV) Infection Death Rates

The number of HIV deaths for American Indians and Alaska Natives residing in the entire U.S. in 1996 (96) is 5 times the number in 1987 (20). A somewhat higher relationship (a ratio of 6.5 to 1) exists for Indians residing in the IHS service area, i.e., there were 52 deaths in 1996 compared to 8 in 1987. However, IHS service area Indians comprise about 60 percent of all U.S. Indians, but in 1996 had only 54 percent of total Indian HIV deaths. When the 1996 IHS service area number is adjusted for miscoding of Indian race on death certificates, it increases to 61 percent. An adjustment factor is not available for All U.S. Indians, but it is expected that the rate of miscoding for All U.S. Indians is greater than the rate for just IHS service area Indians. In this case, IHS service area Indians would have even less than 54 percent of total Indian HIV deaths.



Part 4 General Mortality Statistics

Table 4.55

Human Immunodeficiency Virus (HIV) Infection Deaths and Death Rates

American Indians and Alaska Natives, IHS Service Area, and U.S. All Races and White Populations, 1988-1995  
(Rate per 100,000 Population)

Calendar Year(s)	American Indian and Alaska Native						U.S. All Races Rate	U.S. White Rate
	Entire U.S.		IHS Service Area					
	Number	Rate	Number		Rate			
		Actual	Adjusted	Actual	Adjusted			
(1996)	96		52	59				
1994-1996 (1995)	154	5.5	84	100	5.3	6.2	15.6	11.1
1993-1995 (1994)	120	5.7	62	75	5.0	5.9	15.4	11.2
1992-1994 (1993)	101	4.2	39	45	3.3	3.9	13.8	10.5
1991-1993 (1992)	57	3.7	20	21	2.7	3.0	12.6	9.8
1990-1992 (1991)	76	2.7	38	42	2.2	2.3	11.7	9.4
1989-1991 (1990)	36	2.5	16	17	2.1	2.3	10.1	8.3
1988-1990 (1989)	36	1.7	16	16	1.4	1.4	8.9	7.3
1987-1989 (1988)	26	1.4	13	13	1.2	1.2	6.8	5.4
(1987)	20		8	10			5.5	4.5

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

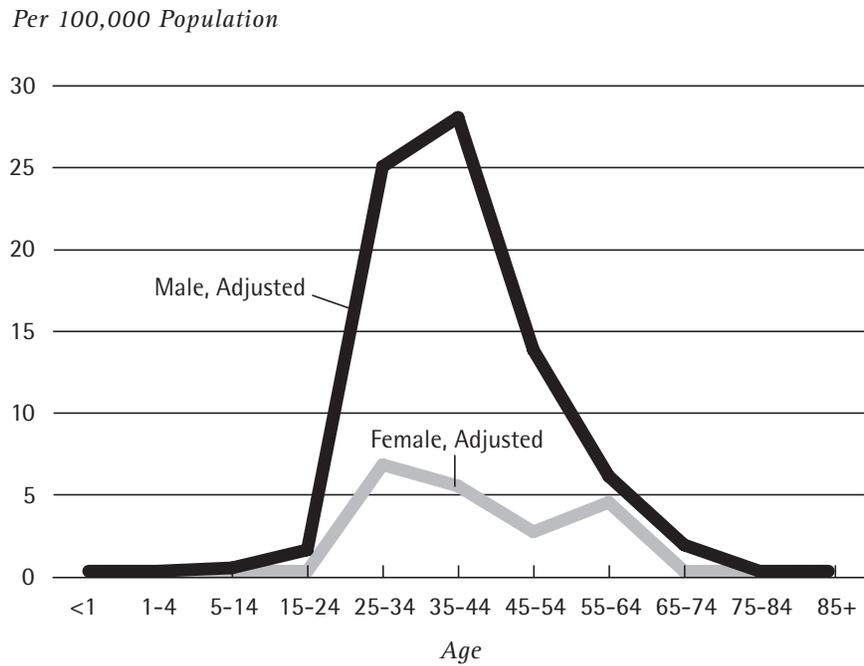
**Note:** Includes cause of death with ICD-9 codes 042-044, first classified in 1987. American Indian and Alaska Native rates are for the 3-year periods specified. Number of deaths and rates for U.S. populations are for the single year specified. American Indian and Alaska Native numbers and rates for the entire United States (shown above) are based on actual (not adjusted) numbers of deaths, since adjustment factors are only available for the American Indian and Alaska Native population residing in the IHS service area.

Part 4 General Mortality Statistics

Chart 4.56

*Human Immunodeficiency Virus (HIV) Infection Death Rates by Age and Sex, American Indians and Alaska Natives (1994-1996)*

The age-specific HIV death rate (1994-1996) for Indian males was greater for all age groups in which there were reported deaths in comparison to Indian females. The rate for Indian males was highest (over 24.0) in age groups from 25 to 44 years. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.56**

*Human Immunodeficiency Virus (HIV) Infection Death Rates by Age and Sex*

American Indians and Alaska Natives, IHS Service Area, 1994-1996, and U.S. All Races and White Populations, 1995  
(Rate per 100,000 Population)

American Indian and Alaska Native						
Age Group	Both Sexes		Male		Female	
	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>	Actual	Adj <sup>1</sup>
Under 1 year	—	—	—	—	—	—
1-4 years	—	—	—	—	—	—
5-14 years	0.1	0.1	0.2	0.2	—	—
15-24 years	0.5	0.7	1.1	1.3	—	—
25-34 years	12.7	15.4	20.6	24.7	5.1	6.5
35-44 years	13.8	16.1	23.4	27.7	4.8	5.2
45-54 years	6.8	7.7	11.6	13.5	2.4	2.4
55-64 years	4.5	4.9	4.8	5.8	4.2	4.2
65-74 years	0.7	0.7	1.6	1.6	—	—
75-84 years	—	—	—	—	—	—
85 years +	—	—	—	—	—	—

U.S. All Races			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	1.5	1.5	1.2
1-4 years	1.3	1.3	1.5
5-14 years	0.5	0.5	0.5
15-24 years	1.8	1.8	1.4
25-34 years	29.1	29.1	11.1
35-44 years	44.5	44.5	13.4
45-54 years	26.3	26.3	6.7
55-64 years	11.0	11.0	2.9
65-74 years	3.6	3.6	1.4
75-84 years	0.7	0.7	0.3
85 years +	0.3	0.3	0.2

U.S. White			
Age Group	Both Sexes		Female
	Actual	Adj <sup>1</sup>	Actual
Under 1 year	0.7	0.7	0.6
1-4 years	0.7	0.7	0.8
5-14 years	0.3	0.3	0.2
15-24 years	1.0	1.0	0.5
25-34 years	21.3	21.3	5.5
35-44 years	31.6	31.6	6.4
45-54 years	18.6	18.6	3.2
55-64 years	7.5	7.5	1.3
65-74 years	2.4	2.4	0.6
75-84 years	0.4	0.4	0.2
85 years +	0.2	0.2	0.2

<sup>1</sup> Adjusted to compensate for miscoding of Indian race on death certificates.

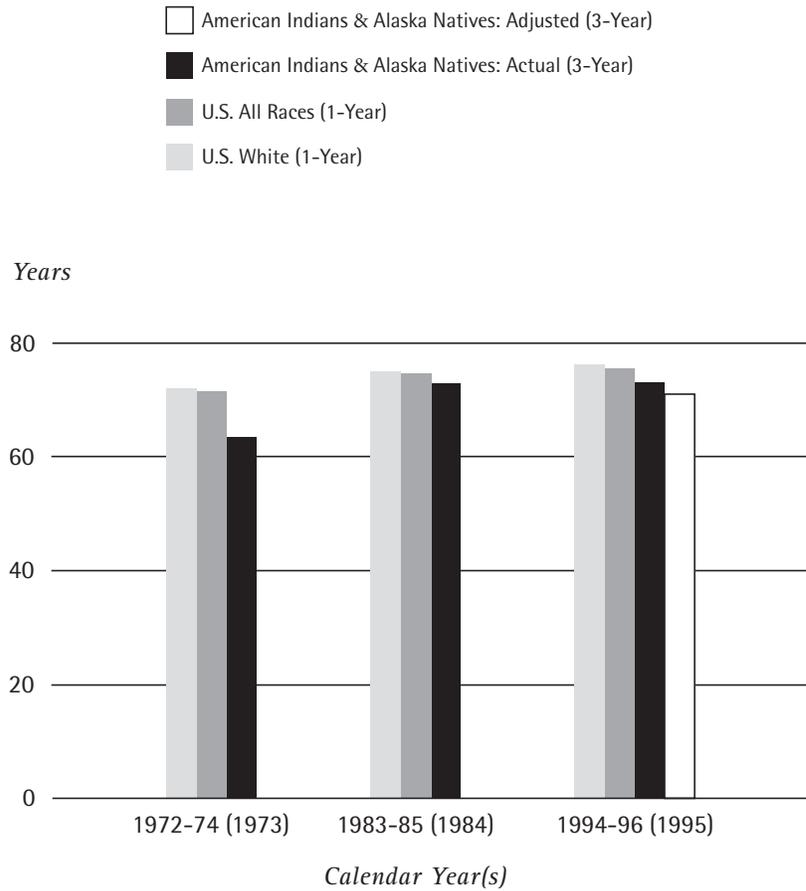
**Note:** — Represents zero.

Part 4 General Mortality Statistics

Chart 4.57

*Life Expectancy at Birth*

Life expectancy at birth for American Indians and Alaska Natives in 1972-1974 was 63.5 years. By 1994-1996, it increased to 71.1 years. This is 4.7 years less than the U.S. All Races life expectancy of 75.8 for 1995 and 5.4 years less than that for U.S. Whites (76.5, 1995). These Indian life expectancies have been adjusted for miscoding of Indian race on death certificates.

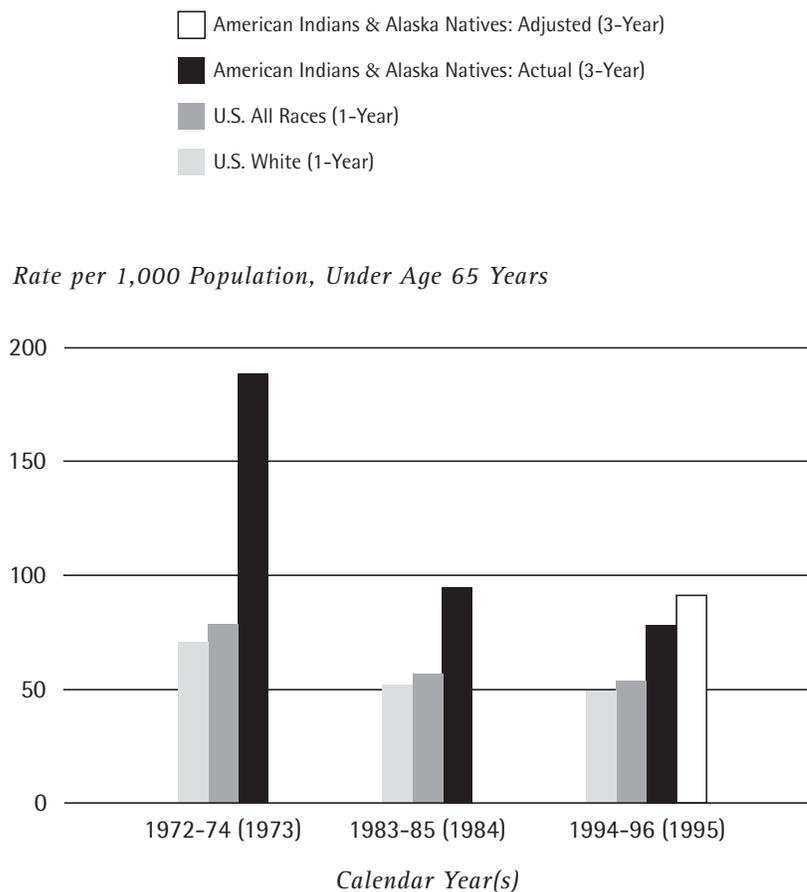


**Part 4** *General Mortality Statistics*

**Chart 4.58**

*Years of Potential  
Life Lost*

The years of potential life lost (YPLL) rate for American Indians and Alaska Natives in 1994-1996 (91.5 per 1,000 population) is less than half of what it was in 1972-1974 (188.3). The 1994-1996 Indian YPLL rate is 70 percent greater than the U.S. All Races YPLL rate of 53.7 for 1995 and 94 percent greater than that for U.S. Whites (47.2, 1995). These Indian rates have been adjusted for miscoding of Indian race on death certificates.

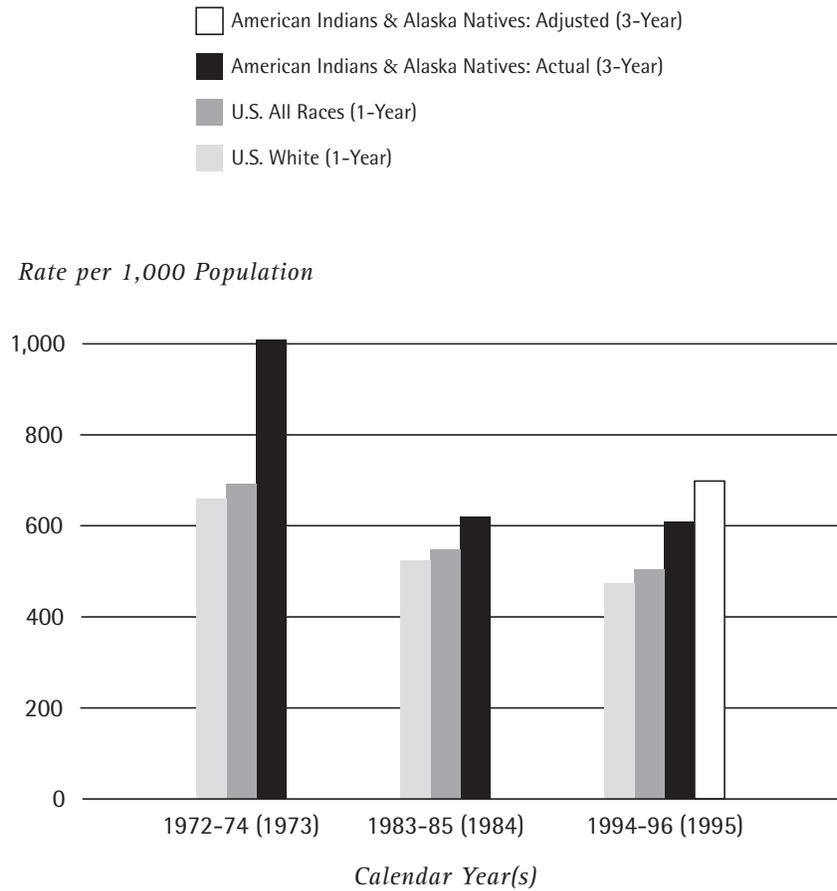


**Part 4** *General Mortality Statistics*

**Chart 4.59**

*Age-Adjusted Death Rates*

The age-adjusted death rate (all causes) for American Indians and Alaska Natives has decreased 31 percent from 1972-1974 (1,007.4 per 100,000 population) to 1994-1996 (699.3). From 1973 to 1995, the U.S. All Races rate decreased 27 percent (692.9 to 503.3) and the U.S. White rate also decreased 28 percent (659.3 to 476.9). The 1994-1996 Indian rate is 39 percent higher than the All Races rate for 1995 and 47 percent higher than the 1995 White rate. These Indian rates have been adjusted for miscoding of Indian race on death certificates.



**Part 4** *General Mortality Statistics*

**Table 4.57**

*Overall Measures of Indian Health*

IHS Service Area Population Compared with the U.S. All Races and White Populations

	Life Expectancy At Birth (Years)		Years of Potential Life Lost (Rate per 1,000 Population <sup>1</sup> )		Age-Adjusted Death Rate (per 100,000 Population)	
	Actual	Adjusted	Actual	Adjusted	Actual	Adjusted
IHS Service Area:						
1994-1996	73.2	71.1	78.1	91.5	609.8	699.3
1983-1985	72.9	NA	94.9	NA	620.9	NA
1972-1974	63.5	NA	188.3	NA	1,007.4	NA
U.S. All Races						
1995	75.8		53.7		503.9	
1984	74.7		56.6		545.9	
1973	71.4		78.9		692.9	
U.S. White						
1995	76.5		47.2		476.9	
1984	75.3		51.4		523.6	
1973	72.2		70.8		659.3	
Ratio: IHS to U.S. All Races:						
1994-1996 (1995)	0.97	0.94	1.45	1.70	1.21	1.39
1983-1985 (1984)	0.98	NA	1.67	NA	1.14	NA
1972-1974 (1973)	0.85	NA	2.39	NA	1.45	NA
Ratio: IHS to U.S. White:						
1994-1996 (1995)	0.96	0.93	1.65	1.94	1.28	1.47
1983-1985 (1984)	0.97	NA	1.84	NA	1.19	NA
1972-1974 (1973)	0.84	NA	2.66	NA	1.53	NA

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

<sup>1</sup> Sum of years of age below age 65 that decedents died divided by the total resident population younger than 65 years of age.

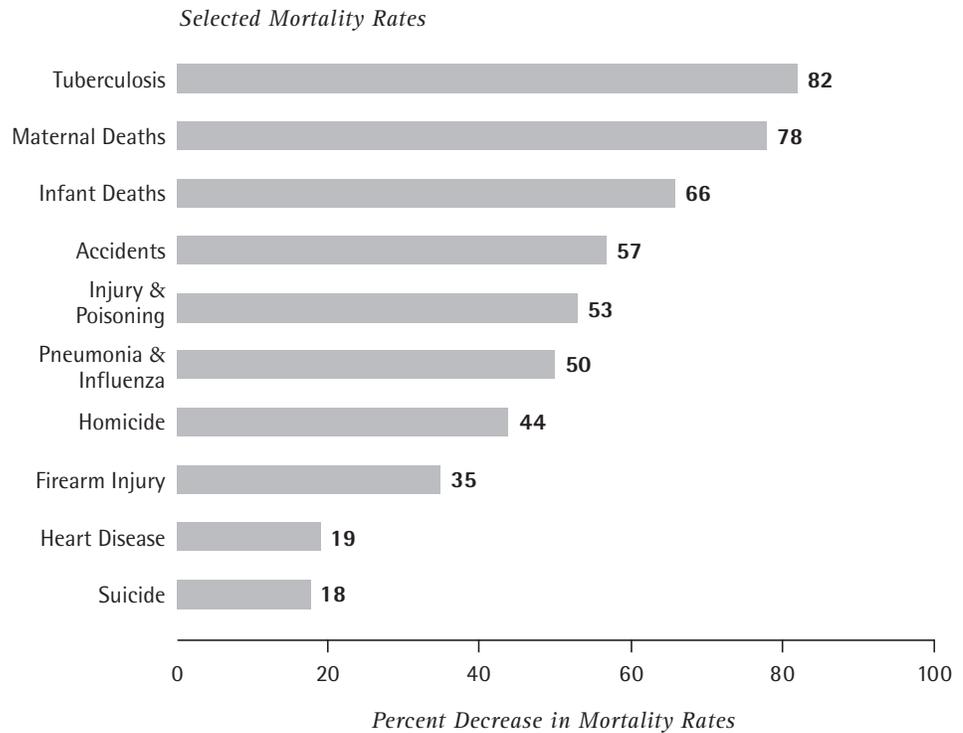
**Note:** NA—Adjusted mortality data for the IHS Service Area population not available for 1972-1974 or for 1983-1985.

Part 4 General Mortality Statistics

Chart 4.60

*Indian Health Service  
Program  
Accomplishments  
Since 1973  
(Actual Mortality Data)*

The health status of American Indians and Alaska Natives has experienced major improvements since 1972-1974. Some of these positive changes are evident from lower death rates. For example, maternal and infant mortality rates have declined 78 percent and 66 percent, respectively. Likewise, age-adjusted death rates have been reduced for tuberculosis (82 percent), accidents (57 percent), injuries and poisonings (53 percent), and pneumonia and influenza (50 percent).

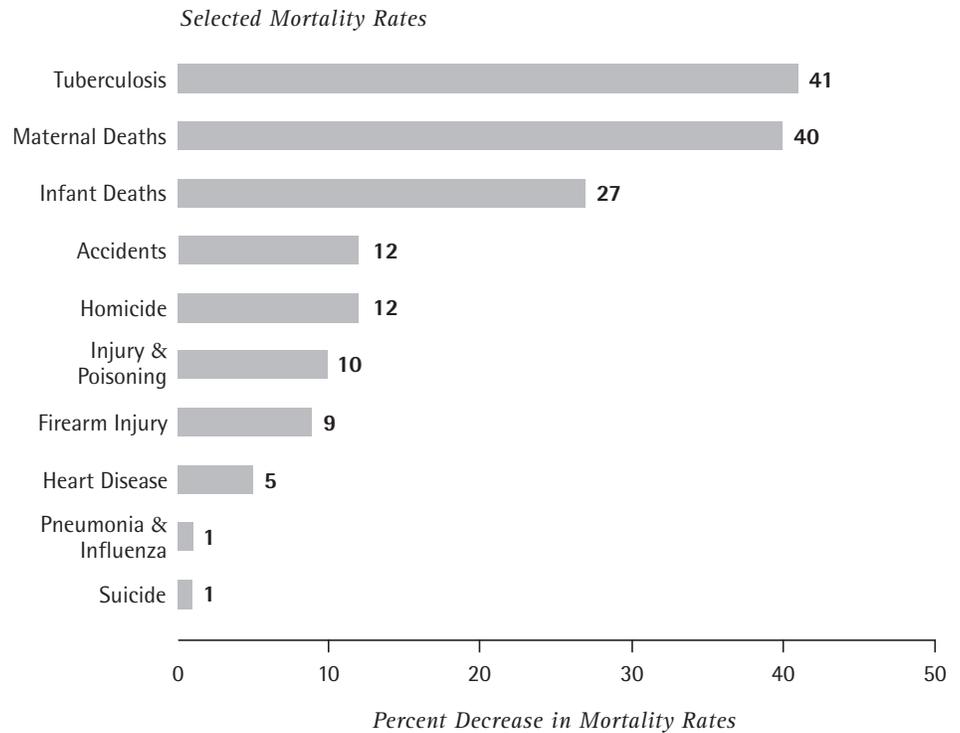


Part 4 General Mortality Statistics

Chart 4.61

*Indian Health Service  
Program  
Accomplishments  
Since 1987  
(Actual Mortality Data)*

The health status of American Indians and Alaska Natives has experienced major improvements since 1982-1989. Some of these positive changes are evident from lower death rates. For example, maternal and infant mortality rates have declined 40 percent and 27 percent, respectively. Likewise, age-adjusted death rates have been reduced 41 percent for tuberculosis and 12 percent each for accidents and homicides.



## Part 4 General Mortality Statistics

**Table 4.60**

### *Program Accomplishments*

#### IHS Service Area

Health Improvements	Rate	Rate	1994-96 Rate		Percent Decrease to 1994-96	
	Actual (1972-74)	Adjusted (1987-89)	Actual	Adjusted	Actual (from 1972-74)	Adjusted (from 1987-89)
Death Rates						
Infant <sup>1</sup>	22.2	12.7	7.6	9.3	66	27
Maternal <sup>2</sup>	27.7	10.2	6.1	6.1	78	40
Pneumonia and Influenza <sup>3</sup>	40.8	22.3	20.2	22.0	50	1
Tuberculosis, all forms <sup>3</sup>	10.5	3.2	1.9	1.9	82	41
Accidents <sup>3</sup>	188.0	104.8	80.6	92.6	57	12
Suicide <sup>3</sup>	21.0	19.4	17.3	19.3	18	1
Homicide <sup>3</sup>	24.3	17.3	13.5	15.3	44	12
Heart Disease	162.8 <sup>4</sup>	164.5	132.4	156.0	19	5
Injury and Poisoning	241.7	144.9	113.6	129.7	53	10
Firearm Injury <sup>4</sup>	25.2	20.8	16.5	18.9	35	9

Adjusted—specifies a number, rate, or ratio of rates adjusted to compensate for miscoding of Indian race on death certificates.

<sup>1</sup>Rate per 1,000 births

<sup>2</sup>Rate per 100,000 live births

<sup>3</sup>Age-adjusted rate per 100,000 population

<sup>4</sup>1979-80 age-adjusted firearm injury mortality rate